

TLP 350CV


TouchLink™ 3.5" Cable Cubby® Touchpanel




Extron® Electronics
INTERFACING, SWITCHING AND CONTROL

Precautions

Safety Instructions • English

- 


This symbol is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.
- 


This symbol is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

Caution

- Read Instructions** • Read and understand all safety and operating instructions before using the equipment.
- Retain Instructions** • The safety instructions should be kept for future reference.
- Follow Warnings** • Follow all warnings and instructions marked on the equipment or in the user information.
- Avoid Attachments** • Do not use tools or attachments that are not recommended by the equipment manufacturer because they may be hazardous.

Consignes de Sécurité • Français

- 


Ce symbole sert à avertir l'utilisateur que la documentation fournie avec le matériel contient des instructions importantes concernant l'exploitation et la maintenance (réparation).
- 


Ce symbole sert à avertir l'utilisateur de la présence dans le boîtier de l'appareil de tensions dangereuses non isolées posant des risques d'électrocution.

Attention

- Lire les instructions**• Prendre connaissance de toutes les consignes de sécurité et d'exploitation avant d'utiliser le matériel.
- Conservser les instructions**• Ranger les consignes de sécurité afin de pouvoir les consulter à l'avenir.
- Respecter les avertissements** • Observer tous les avertissements et consignes marqués sur le matériel ou présentés dans la documentation utilisateur.

Sicherheitsanleitungen • Deutsch

- 


Dieses Symbol soll dem Benutzer in der im Lieferumfang enthaltenen Dokumentation besonders wichtige Hinweise zur Bedienung und Wartung (Instandhaltung) geben.
- 


Dieses Symbol soll den Benutzer darauf aufmerksam machen, daß im Inneren des Gehäuses dieses Produktes gefährliche Spannungen, die nicht isoliert sind und die einen elektrischen Schock verursachen können, herrschen.

Achtung

- Lesen der Anleitungen** • Bevor Sie das Gerät zum ersten Mal verwenden, sollten Sie alle Sicherheits- und Bedienungsanleitungen genau durchlesen und verstehen.
- Aufbewahren der Anleitungen** • Die Hinweise zur elektrischen Sicherheit des Produktes sollten Sie aufbewahren, damit Sie im Bedarfsfall darauf zurückgreifen können.
- Befolgen der Warnhinweise** • Befolgen Sie alle Warnhinweise und Anleitungen auf dem Gerät oder in der Benutzerdokumentation.
- Keine Zusatzgeräte** • Verwenden Sie keine Werkzeuge oder Zusatzgeräte, die nicht ausdrücklich vom Hersteller empfohlen wurden, da diese eine Gefahrenquelle darstellen können.

Instrucciones de seguridad • Español

- 


Este símbolo se utiliza para advertir al usuario sobre instrucciones importantes de operación y mantenimiento (o cambio de partes) que se desean destacar en el contenido de la documentación suministrada con los equipos.
- 


Este símbolo se utiliza para advertir al usuario sobre la presencia de elementos con voltaje peligroso sin protección aislante, que puedan encontrarse dentro de la caja o alojamiento del producto, y que puedan representar riesgo de electrocución.

Precaucion

- Leer las instrucciones** • Leer y analizar todas las instrucciones de operación y seguridad, antes de usar el equipo.
- Conservar las instrucciones** • Conservar las instrucciones de seguridad para futura consulta.
- Obedecer las advertencias** • Todas las advertencias e instrucciones marcadas en el equipo o en la documentación del usuario, deben ser obedecidas.

安全须知 • 中文

- 

这个符号提示用户该设备用户手册中有重要的操作和维护说明。
- 

这个符号警告用户该设备机壳内有暴露的危险电压，有触电危险。

注意

- 阅读说明书** • 用户使用该设备前必须阅读并理解所有安全和使用说明。
- 保存说明书** • 用户应保存安全说明书以备将来使用。
- 遵守警告** • 用户应遵守产品和用户指南上的所有安全和操作说明。
- 避免追加** • 不要使用该产品厂商没有推荐的工具或追加设备，以避免危险。

Warning

- Power sources** • This equipment should be operated only from the power source indicated on the product. This equipment is intended to be used with a main power system with a grounded (neutral) conductor. The third (grounding) pin is a safety feature, do not attempt to bypass or disable it.
- Power disconnection** • To remove power from the equipment safely, remove all power cords from the rear of the equipment, or the desktop power module (if detachable), or from the power source receptacle (wall plug).
- Power cord protection** • Power cords should be routed so that they are not likely to be stepped on or pinched by items placed upon or against them.
- Servicing** • Refer all servicing to qualified service personnel. There are no user-serviceable parts inside. To prevent the risk of shock, do not attempt to service this equipment yourself because opening or removing covers may expose you to dangerous voltage or other hazards.
- Slots and openings** • If the equipment has slots or holes in the enclosure, these are provided to prevent overheating of sensitive components inside. These openings must never be blocked by other objects.
- Lithium battery** • There is a danger of explosion if battery is incorrectly replaced. Replace it only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

- Eviter les pièces de fixation** • Ne pas utiliser de pièces de fixation ni d'outils non recommandés par le fabricant du matériel car cela risquerait de poser certains dangers.

Avertissement

- Alimentations** • Ne faire fonctionner ce matériel qu'avec la source d'alimentation indiquée sur l'appareil. Ce matériel doit être utilisé avec une alimentation principale comportant un fil de terre (neutre). Le troisième contact (de mise à la terre) constitue un dispositif de sécurité : n'essayez pas de la contourner ni de la désactiver.
- Déconnexion de l'alimentation**• Pour mettre le matériel hors tension sans danger, déconnectez tous les cordons d'alimentation de l'arrière de l'appareil ou du module d'alimentation de bureau (s'il est amovible) ou encore de la prise secteur.
- Protection du cordon d'alimentation** • Acheminer les cordons d'alimentation de manière à ce que personne ne risque de marcher dessus et à ce qu'ils ne soient pas écrasés ou pincés par des objets.
- Réparation-maintenance** • Faire exécuter toutes les interventions de réparation-maintenance par un technicien qualifié. Aucun des éléments internes ne peut être réparé par l'utilisateur. Afin d'éviter tout danger d'électrocution, l'utilisateur ne doit pas essayer de procéder lui-même à ces opérations car l'ouverture ou le retrait des couvercles risquent de l'exposer à de hautes tensions et autres dangers.
- Fentes et orifices** • Si le boîtier de l'appareil comporte des fentes ou des orifices, ceux-ci servent à empêcher les composants internes sensibles de surchauffer. Ces ouvertures ne doivent jamais être bloquées par des objets.
- Lithium Batterie** • Il a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du meme type ou d'un ype equivalent recommande par le constructeur. Mettre au reut les batteries usagées conformément aux instructions du fabricant.

Vorsicht

- Stromquellen** • Dieses Gerät sollte nur über die auf dem Produkt angegebene Stromquelle betrieben werden. Dieses Gerät wurde für eine Verwendung mit einer Hauptstromleitung mit einem geerdeten (neutralen) Leiter konzipiert. Der dritte Kontakt ist für einen Erdschluß, und stellt eine Sicherheitsfunktion dar. Diese sollte nicht umgangen oder außer Betrieb gesetzt werden.
- Stromunterbrechung** • Um das Gerät auf sichere Weise vom Netz zu trennen, sollten Sie alle Netzkabel aus der Rückseite des Gerätes, aus der externen Stromversorgung (falls dies möglich ist) oder aus der Wandsteckdose ziehen.
- Schutz des Netzkabels** • Netzkabel sollten stets so verlegt werden, daß sie nicht im Weg liegen und niemand darauf treten kann oder Objekte darauf- oder unmittelbar dagegengestellt werden können.
- Wartung** • Alle Wartungsmaßnahmen sollten nur von qualifiziertem Servicepersonal durchgeführt werden. Die internen Komponenten des Gerätes sind wartungsfrei. Zur Vermeidung eines elektrischen Schocks versuchen Sie in keinem Fall, dieses Gerät selbst öffnen, da beim Entfernen der Abdeckungen die Gefahr eines elektrischen Schlags und/oder andere Gefahren bestehen.
- Schlitze und Öffnungen** • Wenn das Gerät Schlitze oder Löcher im Gehäuse aufweist, dienen diese zur Vermeidung einer Überhitzung der empfindlichen Teile im Inneren. Diese Öffnungen dürfen niemals von anderen Objekten blockiert werden.
- Litium-Batterie** • Explosionsgefahr, falls die Batterie nicht richtig ersetzt wird. Ersetzen Sie verbrauchte Batterien nur durch den gleichen oder einen vergleichbaren Batterietyp, der auch vom Hersteller empfohlen wird. Entsorgen Sie verbrauchte Batterien bitte gemäß den Herstelleranweisungen.

- Evitar el uso de accesorios** • No usar herramientas o accesorios que no sean específicamente recomendados por el fabricante, ya que podrían implicar riesgos.

Advertencia

- Alimentación eléctrica** • Este equipo debe conectarse únicamente a la fuente/tipo de alimentación eléctrica indicada en el mismo. La alimentación eléctrica de este equipo debe provenir de un sistema de distribución general con conductor neutro a tierra. La tercera pata (puesta a tierra) es una medida de seguridad, no puentearla ni eliminarla.
- Desconexión de alimentación eléctrica** • Para desconectar con seguridad la acometida de alimentación eléctrica al equipo, desenchufar todos los cables de alimentación en el panel trasero del equipo, o desenchufar el módulo de alimentación (si fuera independiente), o desenchufar el cable del receptáculo de la pared.
- Protección del cables de alimentación** • Los cables de alimentación eléctrica se deben instalar en lugares donde no sean pisados ni apretados por objetos que se puedan apoyar sobre ellos.
- Reparaciones/mantenimiento** • Solicitar siempre los servicios técnicos de personal calificado. En el interior no hay partes a las que el usuario deba acceder. Para evitar riesgo de electrocución, no intentar personalmente la reparación/mantenimiento de este equipo, ya que al abrir o extraer las tapas puede quedar expuesto a voltajes peligrosos u otros riesgos.
- Ranuras y aberturas** • Si el equipo posee ranuras o orificios en su caja/alojamiento, es para evitar el sobrecalentamiento de componentes internos sensibles. Estas aberturas nunca se deben obstruir con otros objetos.
- Batería de litio** • Existe riesgo de explosión si esta batería se coloca en la posición incorrecta. Cambiar esta batería únicamente con el mismo tipo (o su equivalente) recomendado por el fabricante. Desachar las baterías usadas siguiendo las instrucciones del fabricante.

警告

- 电源** • 该设备只能使用产品上标明的电源。设备必须使用有地线的供电系统供电。 第三条线（地线）是安全设施，不能不用或跳过。
- 拔掉电源** • 为安全地从设备拔掉电源，请拔掉所有设备后或桌面电源的电源线，或任何接到市电系统的电源线。
- 电源线保护** • 妥善布线， 避免被踩踏，或重物挤压。
- 维护** • 所有维修必须由认证的维修人员进行。设备内部没有用户可以更换的零件。为避免出现触电危险不要自己试图打开设备盖子维修该设备。
- 通风孔** • 有些设备机壳上有通风槽或孔，它们是用来防止机内敏感元件过热。 不要用任何东西挡住通风孔。
- 锂电池** • 不正确的更换电池会有爆炸的危险。必须使用与厂家推荐的相同或相近型号的电池。按照生产厂的建议处理废弃电池。

FCC Class A Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

The Class A limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

NOTE: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance with FCC emissions limits.

For more information on safety guidelines, regulatory compliances, EMI/EMF compliance, accessibility, and related topics, [click here](#).

Notational Conventions Used in this Guide

TIP: A tip provides a suggestion to make setting up or working with the device easier.

NOTE: A note draws attention to important information.

CAUTION: A caution warns of things or actions that might damage the equipment.

WARNING: A warning warns of things or actions that might cause injury, death, or other severe consequences.

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Introduction

- [About This Guide](#)
- [About the TLP 350CV](#)
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About This Guide

This guide describes the function, installation, configuration, and operation of the TLP 350CV touch panel controllers.

About the TLP 350CV

The Extron TLP 350CV TouchLink™ 3.5" Cable Cubby® Touchpanel combines A/V system control with cable management. It features a tilt-up, full-color touchscreen in an elegant, metal enclosure that can be mounted securely into a tabletop, lectern or other flat surface. In addition, ten customizable backlit buttons provide expanded control capabilities to ensure that critical functions are easily accessible. The TLP 350CV touchpanel enables integrators to deploy a fully configurable furniture-mounted touchscreen control with cable management and easy access to A/V connectivity and power.

Global Configurator and GUI Configurator software, along with ready-to-use templates, make system setup fast and easy, with no programming required. An integrated Ethernet port provides communication with IP Link®-enabled control processors for controlling and monitoring A/V equipment such as projectors, displays, switchers, and source devices over a standard Ethernet network.

A/V connectivity and cable management is provided by convenient pullout cables such as VGA, 3.5 mm audio, A/V, network, HDMI, DVI and Display port cables. Passive AAP plates and a dual AC outlet are also available.

Using the video input, the panel can monitor video source devices whether as a preview aid or a personal viewer for the operator.

In this guide the terms TLP 350CV, panel and touch panel refer to the TLP 350CV.

Features

TLP 350CV features include:

3.5 inch LCD screen — displays a wide range of customizable graphics.

Touch screen overlay — provides simple and intuitive control over a range of functions by touching on-screen icons.

Built-in speaker — provides audible feedback when a button is pressed.

Ten buttons — for common, user-defined functions. Pre-labeled buttons are available to customize panel operation.

Light sensor — allows auto dimming feature to adjust LCD screen backlighting to ambient lighting.

Lid switch — activates the touchscreen when the lid is opened and deactivates when closed for energy savings.

Sleep mode — conserves power when no button presses are detected for a user-determined period of time, the unit enters sleep mode to conserve power. When a user touches the screen, the panel is reactivated.

Trim Ring — and lid are available in black anodized or brushed aluminium to match room decor.

Video source monitoring — for use as a preview, confidence monitor, or security camera monitor to provide a visual full motion sample of any composite or S-video source.

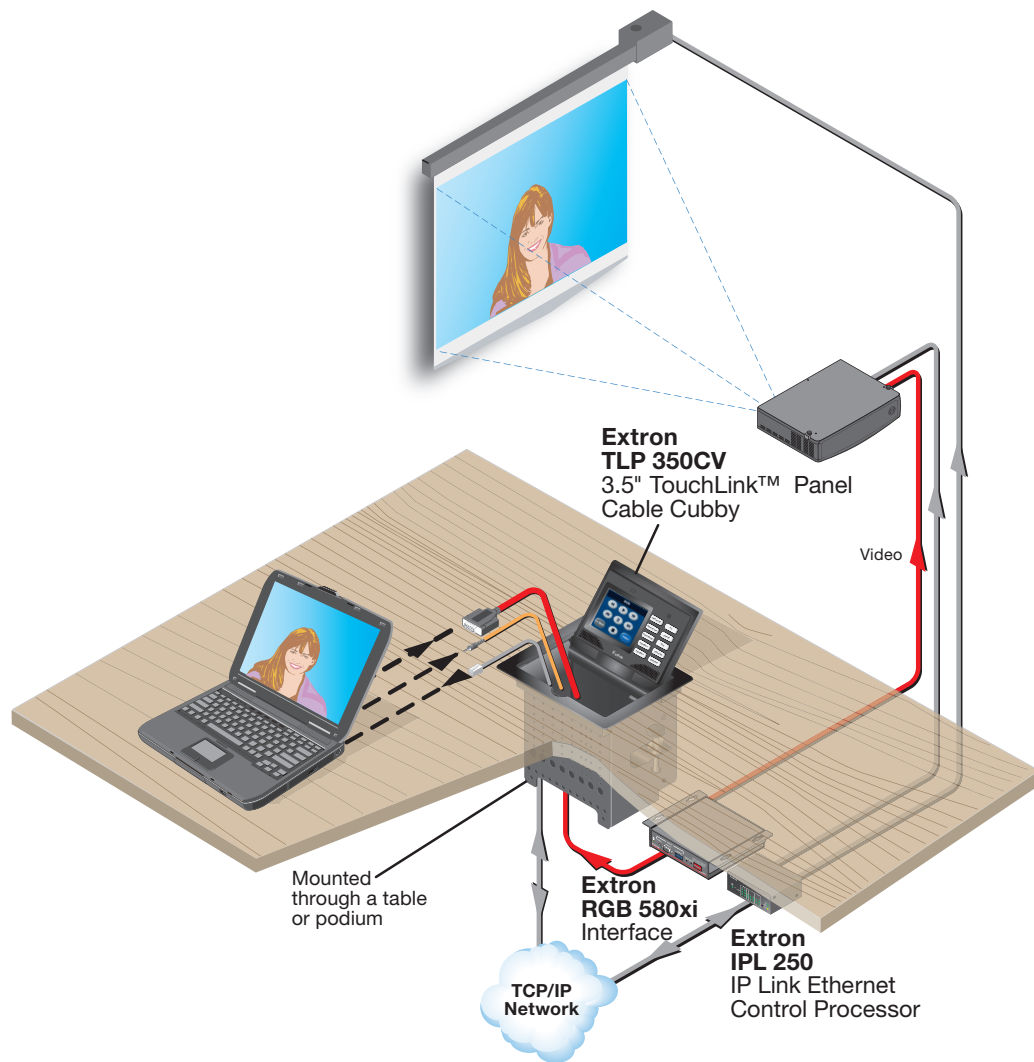


Figure 1. TLP 350CV Application

Requirements

Hardware and Software

The following system requirements are recommended for running GUI Configurator or Global Configurator 3:

- Operating System – Microsoft® Windows® XP SP2, Windows Vista®, or Windows 7
- CPU – Intel® Pentium® III, 1.0 GHz or compatible processor
- Memory – 1 GB of RAM
- Hard Disk space – 100 MB
- Microsoft .NET Framework 2.0 or greater
- Screen Resolution – 320 x 240 resolution at 18-bit color
- Network Connection – 100 Mbps
- Windows-compatible mouse (or other pointing device)
- Global Configurator version 3.0.4 or later
- GUI Configurator version 1.1 or later

Other Hardware

An Extron IP Link control interface must also be connected to the same network domain as the TouchLink panel. Suggested models include:

- IPL T S series (e.g. IPL T S4)
- IPL 250
- IPL T CR48
- IPL T SFI244
- System 208 D
- IPL 500

See the Extron Web site (www.extron.com) for further information about these products.

Visit the touchlink panel site at www.extron.com/touchlink for further assistance in the setup and operation of the TLP 350CV and TLP 350CV, or to enroll in online training. For additional assistance with the touchlink panels, call 1.800.633.9877.

Preparing the Table

This section includes the following topics:

- [Installation Overview](#)
- [Cutout Dimensions](#)

Installation Overview

Planning

- Determine the optimum furniture location for the TLP 350CV keeping in mind the following:
 - the size of the enclosure that will be below the table,
 - the orientation of the touch-screen for ease of viewing,
 - the reach distance for a user for convenient operation,
 - clearances for under-table cabling,
 - the location of devices that may be connected to the AAPs both under and on top of the furniture.
- Obtain the proper cutout dimensions or a router template for the craftsman cutting the enclosure opening in the furniture,
- Determine the number and type of AAPs required by the installation.

Prepare the Cable Cubby enclosure

- Install the power module,
- Assemble the pass-through AAPs, install cables, and if applicable install passive AAPs. Loosely fasten all AAPs to the AAP shelf.
- Install the AAP shelf assembly into the Cable Cubby enclosure and tighten all AAPs.

Install the Enclosure

- Mount the TLP 350CV into the furniture opening,
- Mount and connect the power supply to the TLP 350CV,
- Connect a LAN,
- If using the video monitoring capabilities, make all video input connections,
- Apply power and follow the on-screen instructions to set up the TLP 350CV for first time operation.

Cutout Dimensions

Cutout dimensions are available from Extron as a router guide, printed dimensions for a CNC wood router, and a paper cutout template for a reciprocating saw or jigsaw. If using the router guide, follow the instructions included with it. Printed dimensions are available in [Specifications on page 36](#).

The opening in the table for the Cable Cubby should be cut only by licensed and bonded craftspeople. Exercise care to prevent scarring or damaging the furniture.

Ensure the table surface is at least 3/8 inch (0.375 in) (0.95 cm) thick.

WARNING: Make certain the correct cutout dimensions are being used before proceeding. Extron Electronics is not responsible for improperly positioned Cable Cubby models.

Double-check before you cut:

- If using a routing template, be certain it is the correct template for the TLP 350CV.
- If using a CNC router, be certain the correct dimensions for the TLP 350CV are entered.
- If using a reciprocating saw or jigsaw, be certain to use the correct paper template for the TLP 350CV.
- Be certain the cut is laid out in the desired location.
- Be certain the cut is laid out so the touch panel is oriented as desired.

Mounting the Enclosure

This section includes the following topics:

- [Installing the Power Module, Cables and AAPs](#)
- [Mounting the Enclosure](#)

Installing the Power Module, Cables and AAPs

Each TLP 350CV includes pass-through AAPs and a power module. A wide range of passive AAPs are also available allowing direct connection of cables from the top and underneath the AAPs. See www.extron.com for passive AAP options.

Shelf brackets are available in two-space and three-space configurations. Depending upon the configuration, the enclosure can support up to nine AAPs. The power module takes two (US) or three (Int'l) AAP spaces leaving seven (US) or six (Int'l) spaces for passive or pass-through AAPs.

TIP: The recommended way to install the cables and AAPs is to populate the shelf brackets with pass-through and passive AAP plates outside the enclosure as shown below, then install the populated AAP shelf assembly into the enclosure.

Assemble AAP Brackets and AAPs

Pass-through AAP's provide direct cable connection and must have the cable installed as they are being mounted on the shelf brackets.

Each AAP shelf assembly consists of a set of shelf brackets and a number of cable pass-through and passive AAPs. Decide the location of each AAP prior to assembling the AAP shelf.

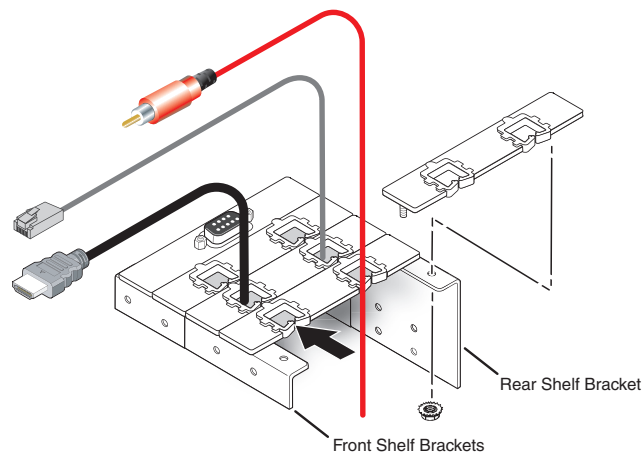


Figure 2. Pass-through and Passive AAP Mounting

TIP: It may be easier to cable the rear of passive AAPs prior to installing them.

Install the Power Module and Shelf Assemblies

NOTE: The included power module takes up two (US) or three (Int'l) AAP spaces and must be installed on the left side of the TLP 350CV enclosure.

Install the power module and AAP assembly into position at the desired location and elevation. Secure with the included #4-40 Phillips head screws.

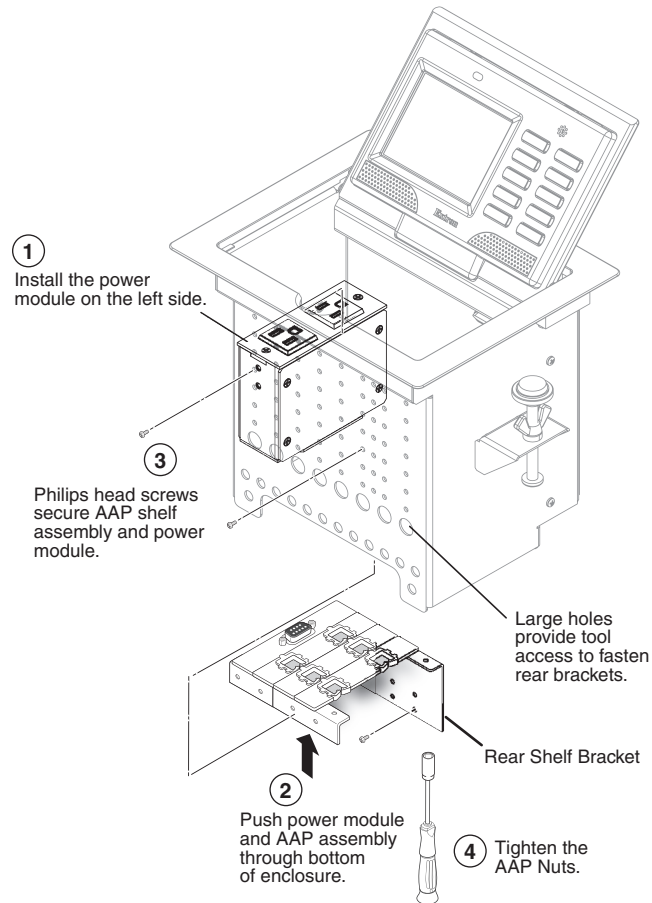


Figure 3. Power Module and AAP Assembly Installation

TIP: If the AAP shelf assembly does not easily slide into the enclosure, loosen the AAP mounting nuts. Retighten the AAP mounting nuts once the AAP shelf assembly is fastened in position.

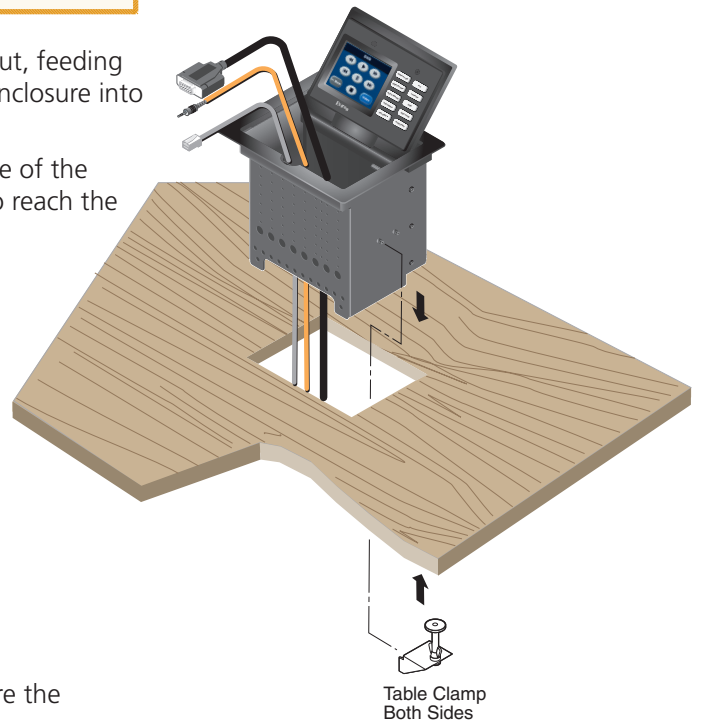
Mounting the Enclosure

CAUTION: The trim ring edges can easily be nicked or bent. Exercise caution when handling and mounting the enclosure.

1. Remove the edge grommet protecting the corners of the trim ring and the plastic film on the finished surfaces.

CAUTION: Do not use isopropyl alcohol or other solvents to clean the Cable Cubby. Strong solvents may ruin some finishes.

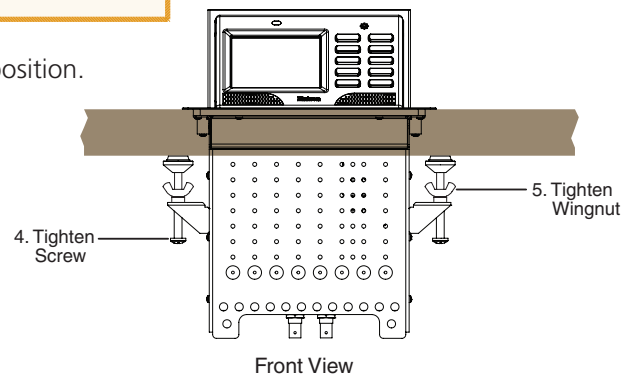
2. Lower the Cable Cubby enclosure into the cutout, feeding the cables hanging from the underside of the enclosure into the opening (see figure at right).
3. Install the table clamps onto the pins on the side of the enclosure at a height which allows the clamp to reach the underside of the tabletop.



4. Tighten the screws on the table clamps to secure the enclosure to the bottom of the table.

CAUTION: Do not overtighten the screw clamps. Overtightening can bend the horizontal flange of the clamp.

5. Tighten the wingnuts to lock the clamps in position.



Connecting the Touch Panel

This section includes the following topics:

- **Connecting the TLP 350CV**
- **Mounting the Power Supply (US models only)**

Connecting the TLP 350CV

The rear panel of the TLP 350CV located on the bottom of the enclosure, provides all required connections. The panel requires an IP Link controller for operation, but may be configured without one connected.

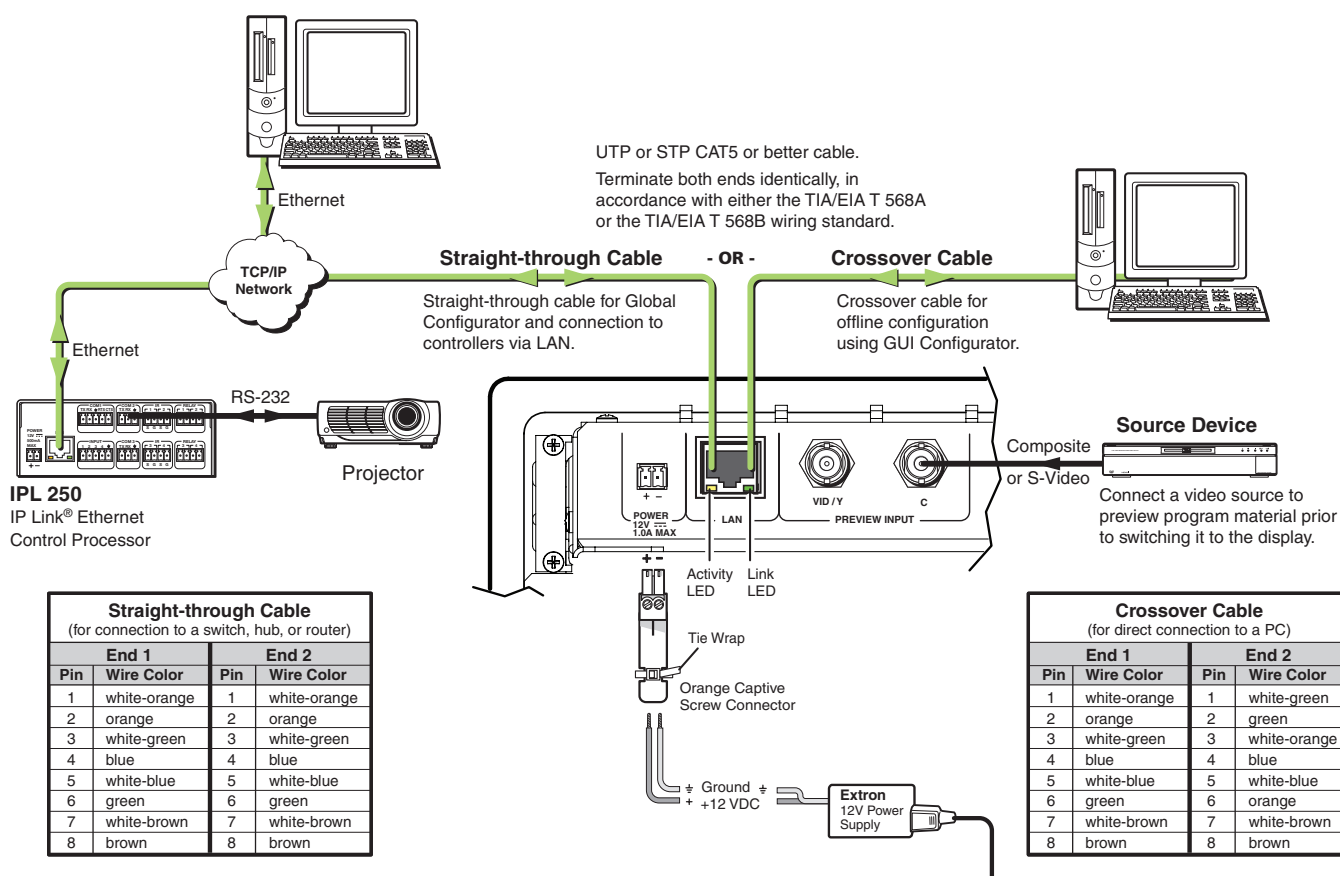


Figure 4. TLP 350CV Rear Panel

CAUTION: Always use a power supply supplied or specified by Extron for use with the TLP 350CV. Use of an unauthorized power supply voids all regulatory compliance certification and may cause damage to the supply and the TLP 350CV.

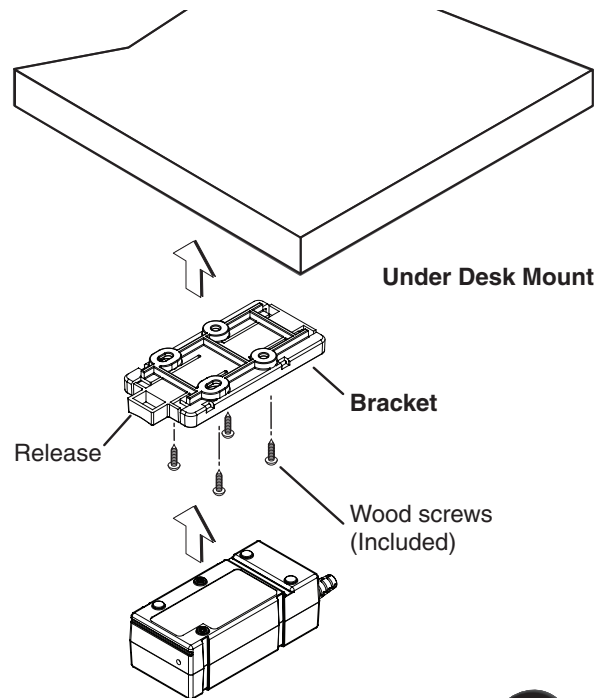
Unless otherwise stated, the AC/DC adapters are not suitable for use in air handling spaces or in wall cavities. The power supply is to be located within the same vicinity as the Extron A/V processing equipment in an ordinary location, Pollution Degree 2, secured to the equipment rack within the dedicated closet, podium or desk.

The installation must always be in accordance with applicable provisions of National Electrical Code ANSI/NFPA 70, article 75 and the Canadian Electrical Code part 1, section 16. The power supply shall not be permanently fixed to building structure or similar structure.

Mounting the Power Supply (US models only)

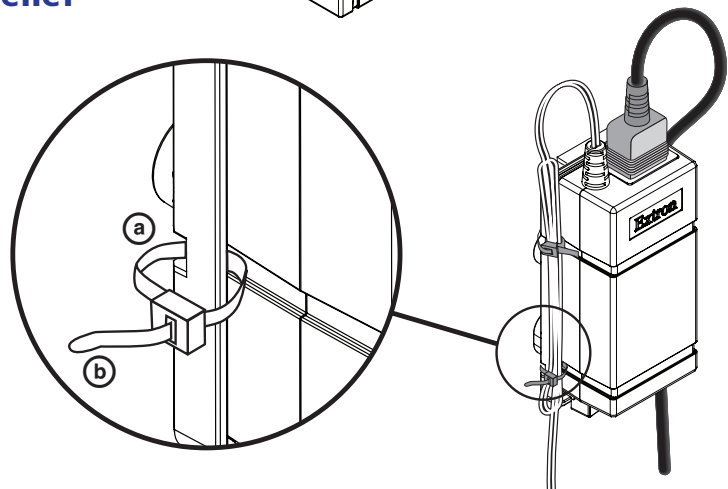
The ZipClip 100 mounting kit, included with the TLP 350CV, enables the power supply to be securely mounted on most surfaces, including racks, tables, and lecterns.

Attach the bracket to the mounting surface using two or more screws, as shown. Make sure the clip is oriented with the appropriate surface facing the mounting surface and with the tab accessible from the front of the furniture.



Using tie wraps for cable strain relief

1. Attach the power supply to the ZipClip 100 mounting clip.
2. Fasten the power output cord to the ZipClip base.
 - a. Insert tie wraps along the notches on the side of the power supply and through the ZipClip tie wrap anchor points, then around the cord.
 - b. Pull the tie wrap until secure. Do not over tighten.



Initial Configuration

This section provides information on the front panel controls and indicators, the on-screen menus used to configure the TLP 350CV, and calibration of the touchscreen.

- **Front Panel Controls and Indicators**
- **Configuring the TLP 350CV (Initial Setup)**
- **Internal On-screen Menus**
- **Touchscreen Calibration**

Front Panel Controls and Indicators

The front panel provides control and operation via the touch screen, the side buttons, and speaker.

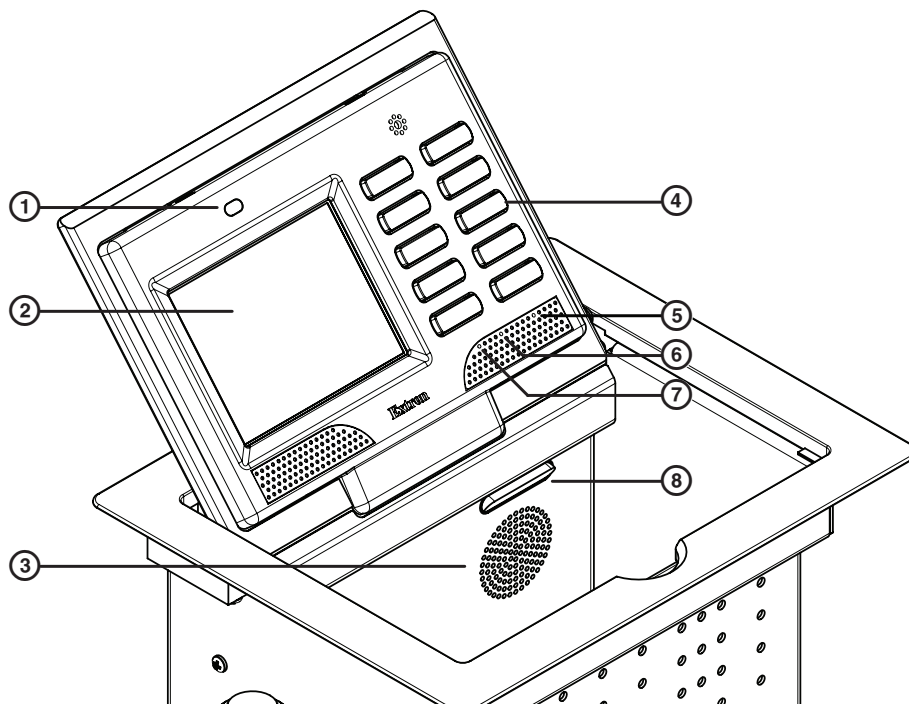


Figure 5. TLP 350CV Front Panel

- ① **Light Sensor** — Provides auto-dimming of the display to maximize viewability in differing lighting conditions.
- ② **LCD screen** — The backlit LCD screen has a resolution of 320 x 240, with 18 bits/pixel (6 bits/color) plus an 8 bit alpha channel providing 26-bit color depth. The touch overlay is broken into a grid with each square corresponding to 64 (8x8) pixels on the LCD screen.

- ③ **Speaker** — Provides audio feedback of button or panel presses.
- ④ **Configurable Side buttons** — 10 dedicated, customizable function buttons provide quick access to key functions.
A set of 6 buttons with alternative labels is included with the TLP 350CV. There are also additional titles available.
See [Button Replacement on page 40](#), for available labels, ordering instructions, and a procedure for changing the buttons.
- ⑤ **Menu Button (under faceplate)** — A menu button is used to configure system and display preferences.

NOTE: The menu and reset buttons are accessible through small holes in the faceplate. A paperclip may be used to press the buttons.

- ⑥ **Reset Button (under faceplate)** — A reset button is used to activate any of the predefined factory reset modes, including returning the panel to factory defaults, (see [Reset Modes on page 38](#)).
- ⑦ **Reset LED Indicator (under faceplate)** — Green LED that flashes to indicate the various reset modes, (see [Reset Modes on page 38](#)).
- ⑧ **Illumination LEDs** — A small block of LEDs illuminate the Cable Cubby inner AAP plates.

Configuring the TLP 350CV (Initial Setup)

Prior to using the TLP 350CV, it is essential to configure it using the internal on-screen menus. The menus are pre-loaded and cannot be altered by the user.

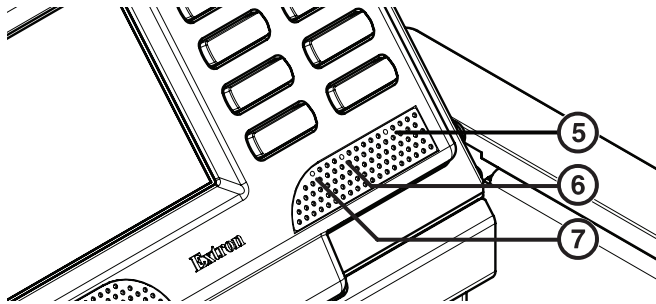
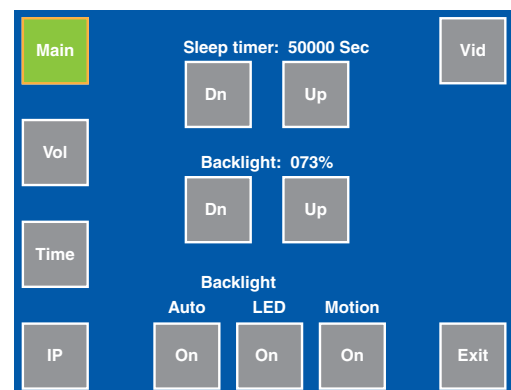


Figure 6. Menu (⑤), Reset (⑥), and Reset LED (⑦)

Internal On-screen Menus

There are five screens (main, volume (Vol), time, IP, and video (Vid)) selected by pressing the appropriate button at the screen perimeter. There is also an exit button at the bottom right corner of the main screen for returning to normal operation.

To enter the main menu, press the recessed front panel menu button (⑤) once. To enter the touchscreen calibration menu, press the menu button (⑤) twice.



Main Menu

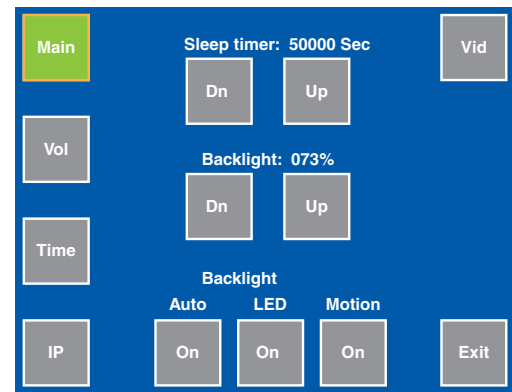
Provides adjustment of the sleep timer and touchpanel brightness (backlight), and LED backlight operation for the side buttons.

Sleep Timer

Sleep mode is activated when there has been a period (0 to 50000 seconds) of inactivity. The backlight is switched off and the touch screen goes dark. Adjust the sleep timer from 0 to 50000 seconds by pressing the **Down** or **Up** buttons.

Sleep mode is overridden by user interaction with the touch screen or side buttons. The backlight is switched on and the screen displays the graphics and text that were on-screen as the sleep timer activated.

NOTE: When the sleep mode is overridden, the first press is ignored to avoid inadvertent button operation. Subsequent presses will engage button functions.



Backlight

Sets maximum touchpanel backlighting. Guidely adjust backlighting from 0 to 100% by pressing the **Down** or **Up** buttons. The current setting is shown just above the buttons.

Auto Backlight

Automatically adjusts the backlight depending on the ambient light detected by the front panel sensor. Use the **Auto Backlight** button to toggle Auto Backlight off and on. Maximum brightness cannot exceed the backlight setting (see above).

LED Backlight

An LED backlight illuminates the ten buttons next to the screen. Use the on-screen button to toggle the option **Off** and **On**.

Volume Control

The Volume Control menu allows the user to adjust the maximum volume of the sound, individual volume of button click feedback, and audio playback. Pressing main returns you to the main setup screen.

Master Volume

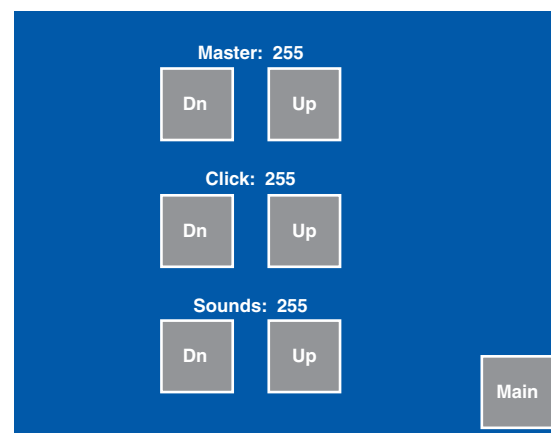
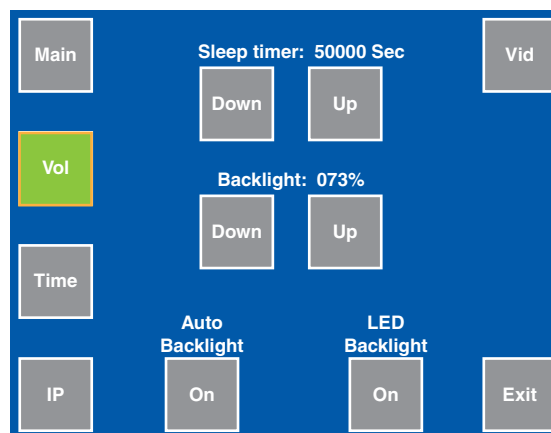
Master volume defines the maximum volume for all playback. All other volume settings will be scaled in proportion. If the master volume is set at 50% of full volume and the click volume is also set at 50% of its full volume, the maximum volume for the click playback will be 50% of 50%, or 25%. Adjust the master volume from 0 to 255 by pressing the **Dn** or **Up** buttons.

Click Volume

Click volume provides audio feedback of button presses including the side buttons and the touch panel buttons. Adjust click volume from 0 (min) to 255 (max) by pressing the **Dn** or **Up** buttons.

Sounds Volume (not available on TLP 350CV)

Sounds volume provides audio level control when monitoring a playback device, if connected. Adjust sound volume from 0 (min) to 255 (max) by pressing **Dn** or **Up**.



Time (and Date)

The time tab also adjusts the date. Use the on-screen buttons to set the day, month, year, and the time in hours and minutes.

NOTE: The Hours value uses the 24 hour clock. For 10 am, set hours to 10; for 10 pm, set hours to 22.

When attached to a controller, the panel synchronizes its time settings, Greenwich Mean Time (GMT) offset, and DST. Values are also resynchronized each day at midnight or by pressing the recessed front panel menu button for 10 seconds. Pressing main returns you to the main setup screen.



IP (Network)

The IP configuration menu displays network-related parameters.

IP Address

This text box displays the currently configured IP address for the panel.

To change the IP address:

1. Press the on-screen IP address box. A new screen appears with a number pad.
2. Enter the desired IP address in the format: xxx.xxx.xxx.xxx.
3. If a mistake is made, press **CLR** (clear) in the IP Address dialog box, then repeat step 2 until all the octets have been set correctly.

NOTE: The factory default IP address is 192.168.254.254. Consult with your IT Department to ensure all IP addresses are correctly assigned.

Subnet Mask

This text box displays the currently configured subnet mask for the panel.

To change the subnet mask:

1. Press the on-screen subnet mask box. A new screen appears with a number pad.
2. Enter the desired subnet mask in the format: xxx.xxx.xxx.xxx.
3. If a mistake is made, press **CLR**, then repeat step 2 until all the octets have been set correctly.

DHCP

Toggles DHCP **Off** and **On**. Generally the TLP 350CV should be assigned a static IP to avoid communications errors on local networks.

MAC
00-05-A6-05-7D-A6

IP Address
192.168.254.254

Subnet Mask
255.255.000.000

DHCP Off

Main

MAC
00-05-A6-05-7D-A6

IP Address
192.168.254.254

Subnet Mask
255.255.000.000

DHCP Off

Main

| | | |
|---|---|-----|
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |
| . | 0 | CLR |

Video

The video menu adjusts the appearance of a video signal connected to the video inputs.

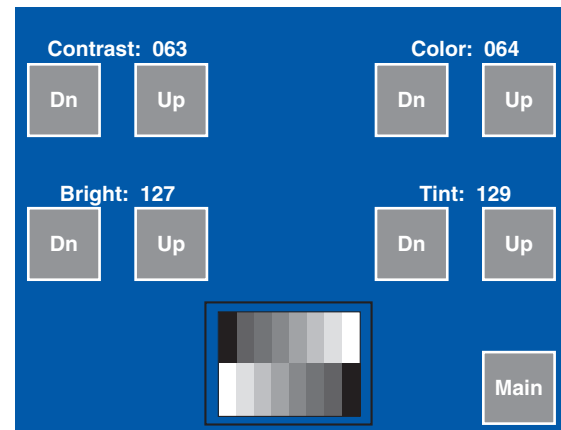
Use the **Dn** and **Up** buttons or the volume control knob to adjust:

- Contrast between 0 and 127 (default, 64)
- Color between 0 and 127 (default, 64)
- Brightness between 0 and 255 (default, 128)
- Tint between 0 and 255 (default, 128)

The small rectangle provides a preview of incoming video and allows the user to adjust the video properties.

to adjust contrast between 0 and 127 (default, 64); color between 0 and 127 (default, 64); brightness between 0 and 255 (default, 128); and tint between 0 and 255 (default, 128).

The small rectangle provides a live preview window of the incoming video.



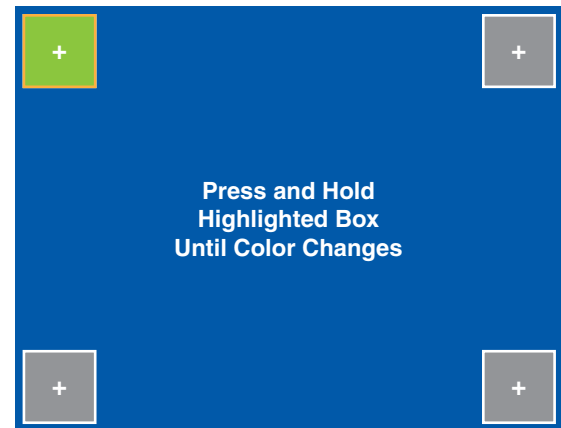
Touchscreen Calibration

If the touchscreen panel does not react properly to a finger touch, it may require calibration.

To access the touchpanel calibration screen:

1. From the main setup menu, press the recessed menu button (Ⓜ) once to access the calibration menu. From any other screen, press the recessed menu button twice (within one second) to access the calibration menu. The screen shown on the right appears.
2. Using a finger, press and hold on the green box until the color reverts to gray with a white border and a second box is highlighted in green.
3. Move to the newly highlighted box and repeat step 2.
4. Repeat until all four boxes have been pressed and are gray.
5. Once all four boxes have been calibrated the screen automatically returns to the Main menu (see [“Internal On-screen Menus” on page 13](#)).

The touch screen is now calibrated and ready for configuration or normal operation.



Configuration Software

The section provides information on the following topics:

- [Configuration and Control Software](#)
- [Installing Software](#)
- [Using the TouchLink Panel Web Pages](#)
- [Using GUI Configurator](#)
- [Using Global Configurator](#)

Configuration and Control Software

Designing a graphical user interface (GUI) for the TouchLink panel takes two steps:

- Design the layout of the text and graphics. (See [Using GUI Configurator on page 22.](#))
- Assign functions to the text and graphics. (See [Using Global Configurator on page 27.](#))

The GUI Configurator Software is a Windows-based application. The interface is designed either by customizing an existing template or by designing an entirely new interface. GUI Configurator offers several templates that are designed to manage control system devices.

Once the GUI has been designed on a PC, the project is saved, built, and uploaded to the TouchLink panel to verify what it looks like on the screen. It is then imported from the TLP unit to Global Configurator where control functions are assigned to the text and graphic items in the layout. After assigning the control functions, the project is rebuilt and uploaded to the controller.

These two programs provide versatility and adaptability for configuration and control of an A/V system as it grows and evolves.

Both are included on the disc provided with the TLP 350CV and are also available free on the Extron website at www.extron.com. Each contains an extensive help file to guide project development.

Installing Software

GUI Configurator and Global Configurator Installation

NOTE: You must use Global Configurator 3.0.4 or a later version and GUI Configurator 1.1 or a later version to configure the TLP 350CV.

Insert the disc provided into the computer's DVD ROM drive. If the setup program does not start automatically, run Launch.exe from the DVD ROM directory in Windows "My Computer". Select the **Software** tab, locate the GUI Configurator program and click **Install**. Follow the on-screen instructions.

By default, the Installer program creates and places the GUI Configurator program in the C:\Program Files\Extron\GUI Configurator folder. An icon may also be placed on the Windows desktop.

If required, locate the Global Configurator program on the disc or Web site and install that also. By default, the Installer program creates and places the Global Configurator program in the C:\Program Files\Extron\GCx.x folder, where x.x represents the version of the Global Configurator program. During installation, there is an option to place an icon on the Windows desktop.

Both programs can be downloaded from the Extron Web site (www.extron.com). Select the **Download** tab and click on the **Software** option in the sidebar at the left. Navigate to GUI Configurator or Global Configurator and click **Download** next to the program. Follow the on-screen instructions to complete installation. A folder is created on the C drive and an icon may be placed on the desktop.

Using the TouchLink Panel Web Pages

The TLP 350CV TouchLink panel has default Web pages that can be used to read and change the current settings of the panels. The Web pages can be accessed as follows:

1. Open your browser and type the IP address of the TLP 350 unit into the address box. The browser opens the TouchLink panel Status page, which is read-only and provides basic information about the model, date and time, and IP settings.

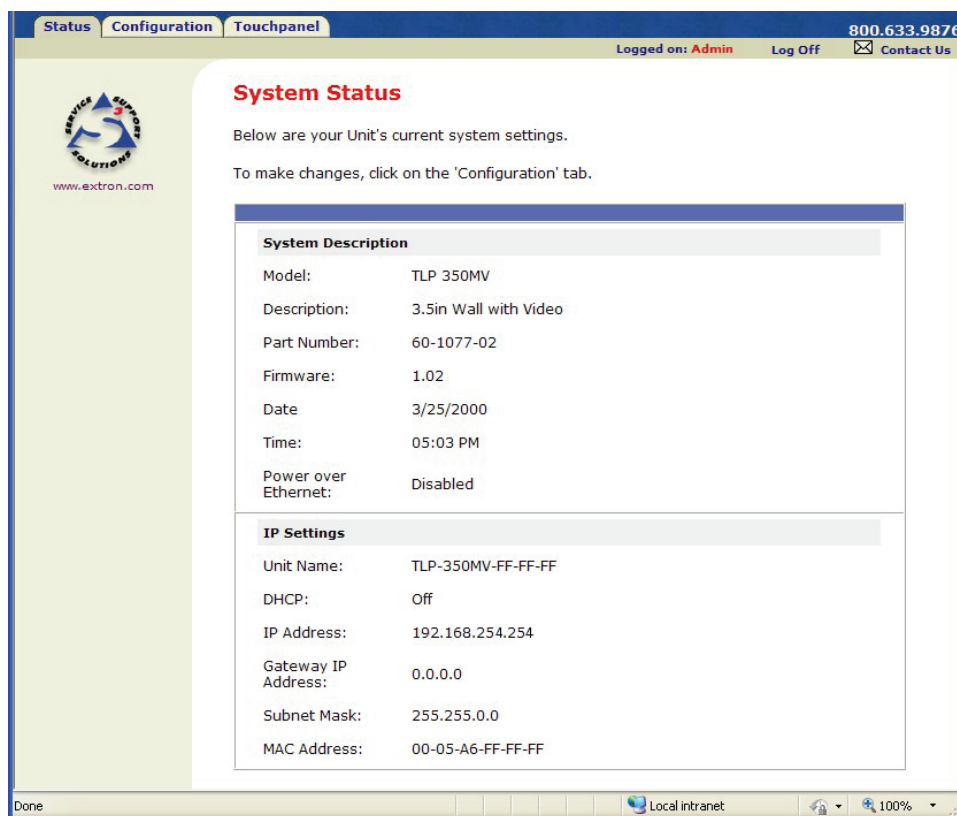


Figure 7. System Status Page

2. Click on the **Configuration** tab and select the **System Settings** page, which allows the user to modify information about the IP settings and the date and time settings. These correspond to the **IP settings** (see **IP (Network) on page 16**) and **Time settings (Time (and Date) on page 15)** in the on-screen menus.

System Settings

Below are your Unit's basic System Settings. Most units will work with the default IP Settings without making any changes. If you require help changing your settings, please refer to the user guide.

IP Settings

Unit Name: TLP-350MV-FF-FF-FF

DHCP: ☐ On ☒ Off

IP Address: 192.168.254.254

Gateway IP Address: 0.0.0.0

Subnet Mask: 255.255.0.0

MAC Address: 00-05-A6-FF-FF-FF

Firmware: 1.02

Model: TLP 350MV

Part Number: 60-1077-02

Date/Time Settings

Date: 8/5/2010

Time: 2:52 PM

Zone: (GMT-08:00) Pacific Time (US & Canada), Tijuana

Daylight Saving: ☐ Off ☒ USA ☐ Europe ☐ Brazil

Figure 8. System Settings

3. Selecting **Passwords** allows the user to set passwords for an Administrator and a User. To set a password, follow the instructions at the top of the page.

Passwords

To update the Administration Password, enter the desired password, repeat the entry, and press 'Submit'. To update the User Password, enter the desired password, repeat the entry, and press 'Submit'. To clear a password, enter a single space, repeat the entry, and press 'Submit'. Minimum password length is 4 characters. Maximum password length is 12 characters. Passwords are case sensitive and special characters are not allowed.

Passwords

Administrator Password:

Re-enter Admin Password:

User Password:

Re-enter User Password:


Figure 9. Passwords

4. To upgrade the unit's firmware, select **Firmware Upgrade**. More detailed instructions are found in the ["Updating Firmware from a Browser"](#) section on page 17.
5. Click on the **Touchpanel** tab, which allows the user to alter the Touchpanel and volume settings. These correspond to the **Main settings** (see page 8) and Volume settings (see page 9) in the on-screen menus.

StatusConfigurationTouchpanel

800.633.9876
Logged on: AdminLog OffContact Us

Touchpanel Settings


www.extron.com

Touchpanel Configuration

Below are the settings for your Touch Link Panel. These adjustments can also be made using the internal setup screens on the unit.

Touchpanel Settings

SleepTimeout: Hours: 0 Minutes: 0 Seconds: 10

WakeonMotion: ☐ On ☒ Off

Auto Backlight: ☒ On ☐ Off

Backlight Setup: LED Backlight: ☒ On ☐ Off

Backlight Level 0%

Volume Settings

Master Volume: 211

Click Volume: 204

Sounds Volume: 200

DoneLocal intranet100%

Figure 10. Touchpanel Configuration

Using GUI Configurator

This section provides an overview of the GUI Configurator program. For complete information about the program, consult the GUI Configurator Help File (select **Contents** in the Help Menu or press the F1 key while within the program).

NOTE: To configure the TLP 350CV, use GUI Configurator version 1.1 or later.

To use the GUI Configurator program, follow these instructions:

1. Click on the desktop icon. A splash screen appears momentarily and then the program opens at the main screen behind the “GUI Configurator Start Options” dialog box.

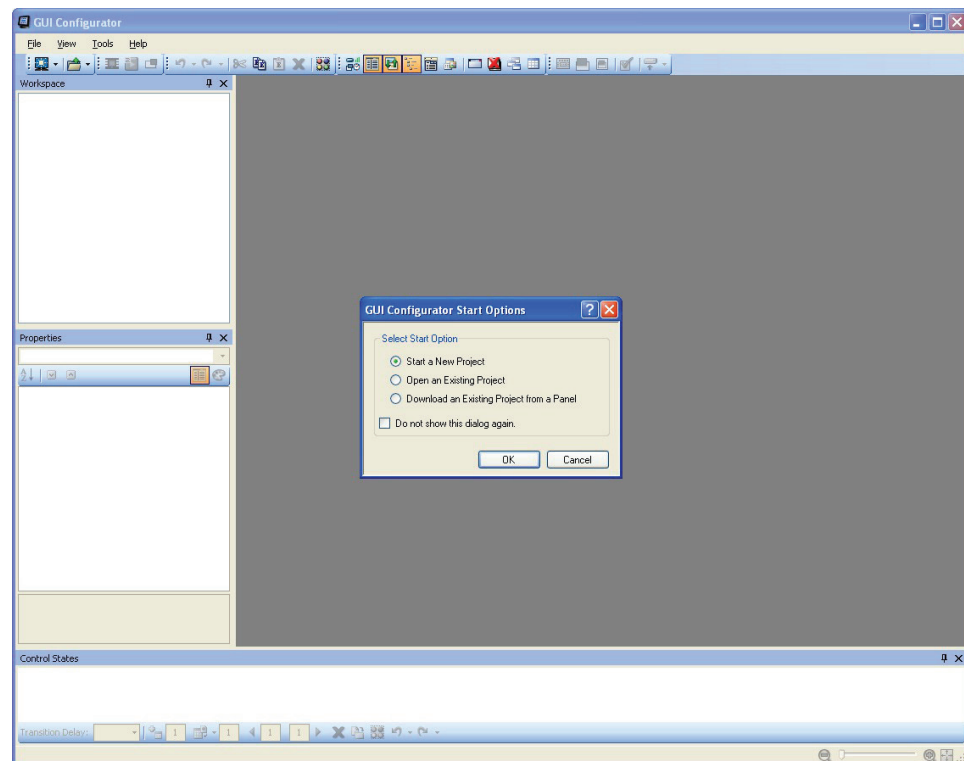


Figure 11. Opening GUI Configurator

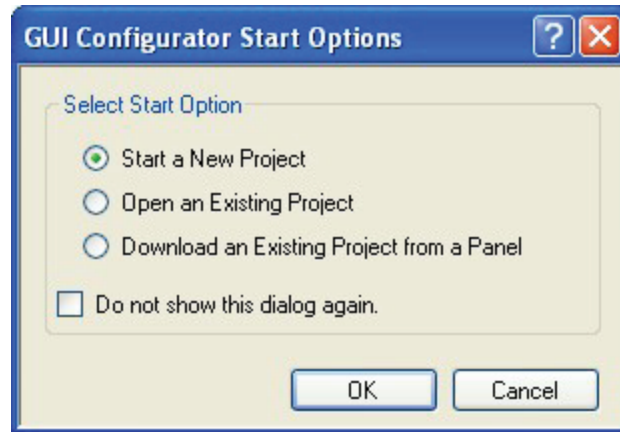


Figure 12. GUI Configurator Start Options Dialog Box

2. You can choose to:
 - **Start a New Project** — Clicking **OK** opens a dialog box that offers a choice of project options.

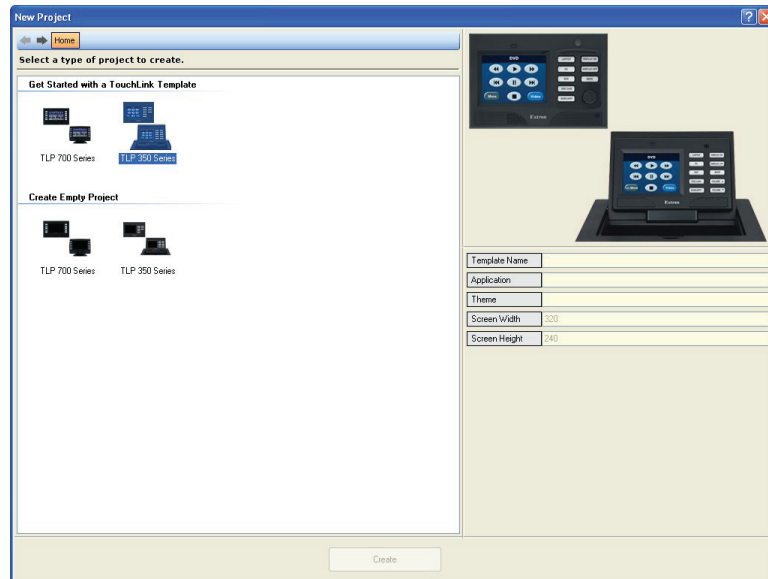


Figure 13. GUI Configurator New Project Dialog Box

A series of icons offer the choice of creating a project with or without a template and allows you to select the size and type of Touchlink panel. If you are creating a project from an existing template, you can use the factory-loaded templates or select a previously created template.

- **Open an Existing Project** — Clicking **OK** opens a dialog box that allows you to navigate to an existing project for modification.

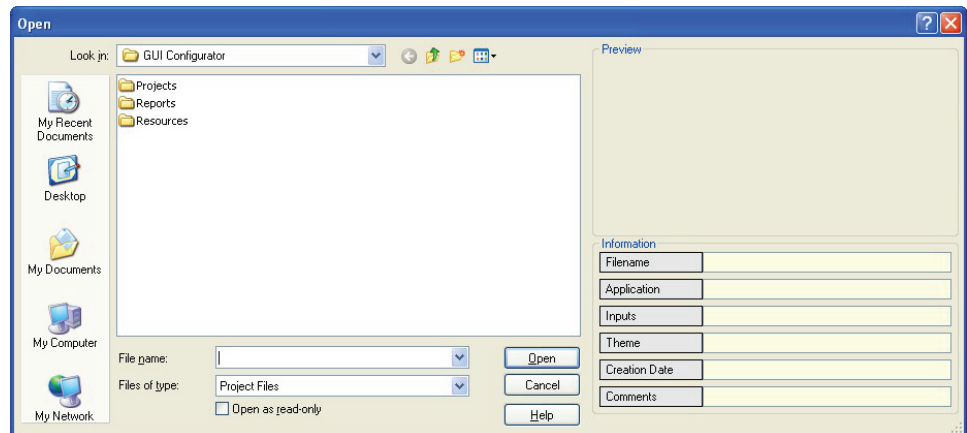


Figure 14. GUI Configurator Dialog Box to Open an Existing Project

Navigate to the existing file and select it. A preview with information about the file appears in the pane on the right.

If you will be working on the project, leave the “**Open as read-only**” box unchecked.

Click **Open** to open the file. The project will open in GUI Configurator.

- **Download an Existing Project from a Panel** — Clicking **OK** opens a dialog box that allows you to download a file that has been uploaded to a panel.

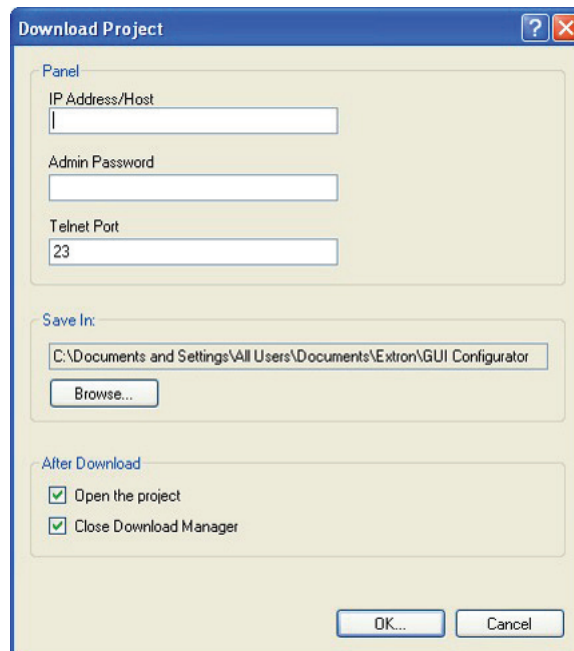


Figure 15. GUI Configurator Download Project Dialog Box

In the dialog box that opens, enter the IP address of the panel and use the **Browse** button to navigate to a folder where the file will be saved.

Check “**Open the project**” and, “**Close Download Manager**”.

Click on **OK**. The project will be downloaded to your computer and will open in GUI Configurator.

3. Depending on which option was selected in step 2, GUI Configurator opens to a new or an existing project. The initial screen is divided into a series of panes offering a range of tools that can be used to design or modify the project. For full details on how to use these tools, consult the help file (in the Help menu click on **Contents** or press the F1 key while within the program).

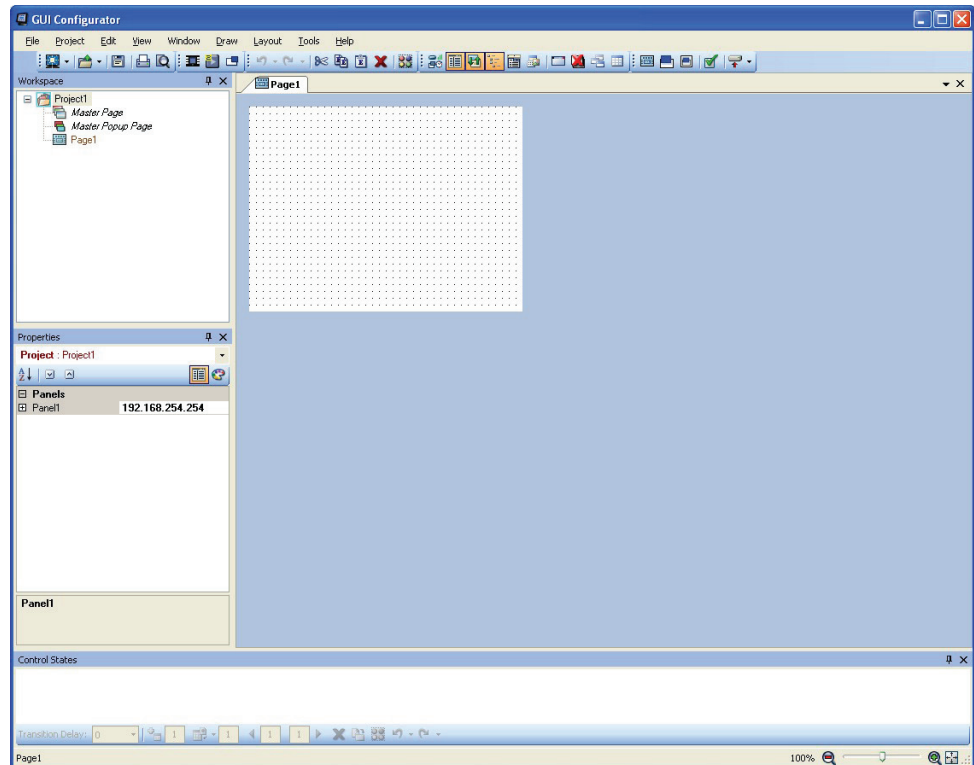


Figure 16. GUI Configurator Main Screen

4. To save the project, select **Save Project** from the File menu. The project file is saved. If this is the first time saving the project file, the "Save As" dialog box appears. If the "Save As" dialog box appears:
 - a. Browse for the location where the project file is to be saved.
 - b. Enter a file name for the project.
 - c. Click **Save**.
5. The project can be uploaded to one or more TouchLink panels. To add a panel, to which the project can be uploaded:
 - a. From the Project menu, select **Add > Panel**:

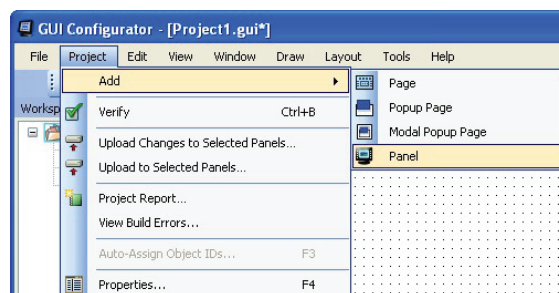


Figure 17. Add a TouchLink panel (5a)

- b.** The Panel Manager dialog box opens:

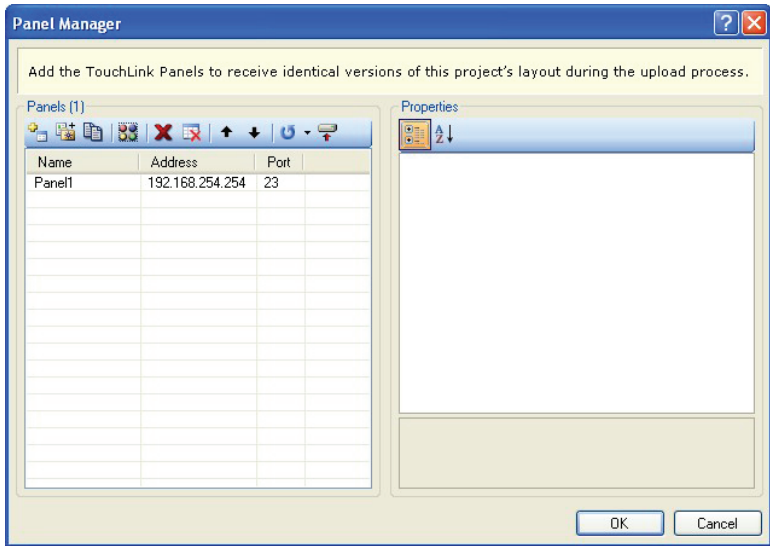


Figure 18. Add a TouchLink panel (5b)

- c. Click on the Add Panel Icon to add a new panel to the list in the left pane.
 - d. Highlight the name of the panel in the left pane to display the properties of that panel in the right pane.
 - e. When a new panel is added, it has the default IP address (192.168.254.254). To change the IP address, highlight the address property in the right pane and type in the correct IP address. Update any other properties, as required.
 - f. Repeat steps **a - e** to add further panels, if required.
6. To upload a project to a TouchLink panel:
 - a. From the Project menu, select **Upload to Selected Panels**. The Build Manager dialog box opens, showing the build progress. Once the build is complete, this dialog box closes and the File Upload Manager screen opens. The upload begins automatically.
 - b. Select **Close this dialog when upload completes** checkbox in the Automatic Settings section so that the File Upload Manager screen closes automatically once the upload completes. This option can be set before or during the upload.

If this project has been uploaded to the TouchLink panel before, you can choose to upload the changes that have been made to the previous upload. You can also choose to upload to certain TouchPanels from the list of TouchLink panels found within the Devices section of the File Upload Manager screen during the upload process.

Using Global Configurator

NOTE: To configure the TLP 350CV, use Global Configurator version 3.0.4 or later.

This section provides an overview of the Global Configurator program. For complete information about the program, consult the Global Configurator help file (click on **Contents** in the Help menu or press the F1 key while within the program).

This section describes how to set up Global Configurator project with an IPL 250. Setting up a project with another IP Link product will be similar but you should consult the Global configurator help file for exact information about the product you are using.

1. Double click on the GC3 desktop icon. The “Global Configurator 3 Start Options” box opens.

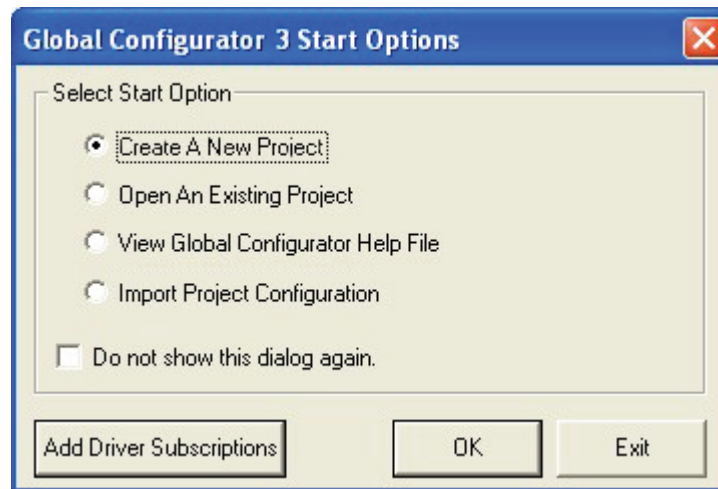


Figure 19. Global Configurator 3 Start Options

2. Select “**Create A New Project**” and click **OK**. The dialog box closes, leaving the Project Settings screen.

Figure 20. Global Configurator Project Settings

3. Enter the IP Address for the TLP 350CV panel.

The default Telnet connection is port 23 and HTTP is port 80, so these values do not usually need to be changed.

If necessary, set Administrator and User passwords.

If required, set the date and time.

Checking the **“Set Device as GlobalViewer Host”** box is optional.

4. Click **OK** and the Project Settings screen closes and is replaced by the “Add Device” dialog box:

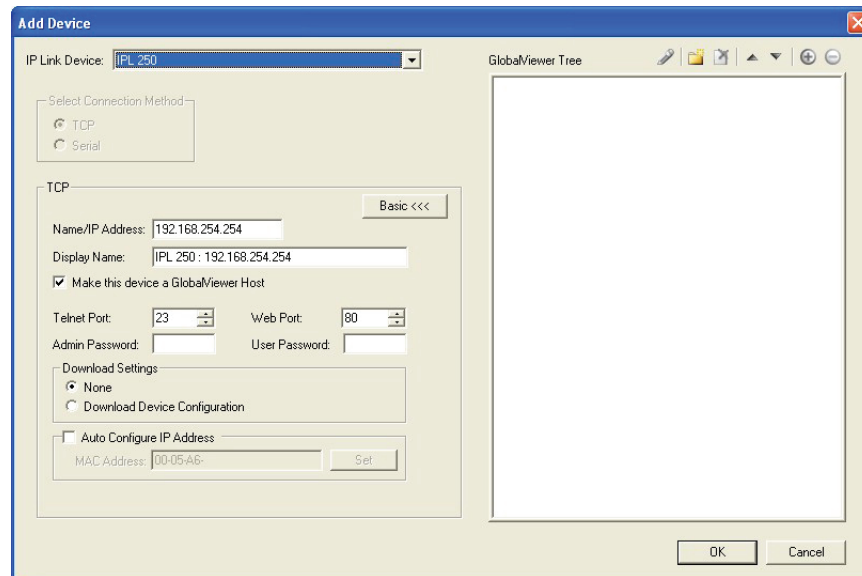


Figure 21. Global Configurator Add Device Dialog Box

To see all the options, click on the “**Advanced >>>**” button. The button name changes to “**Basic <<<**” (as shown in the figure above).

- a. Select the IP Link device from the drop-down menu. In figure 32, above, an IPL 250 controller is added. Adding a different IP Link product will be similar.
- b. Enter the IP address of the IP Link controller. The default value is 192.168.254.254, but this may have been changed. Check with your IT Department to verify the address.
- c. Enter a Display Name into the text box. This is what the device will be known as in the Global Configurator project.
- d. Checking the “**Make this device a GlobalViewer Host**” checkbox is optional.
- e. Set the telnet port (usually 23) and the web port (usually 80).
- f. If the controller is password protected, enter the password now.
- g. In the right pane, set up a GlobalViewer tree. For information about this, refer to the Global Configurator help file.

- Click **OK** and the Add Device screen closes. The start-up screen, which was behind it, is now visible, showing the IPL 250 and the available ports:

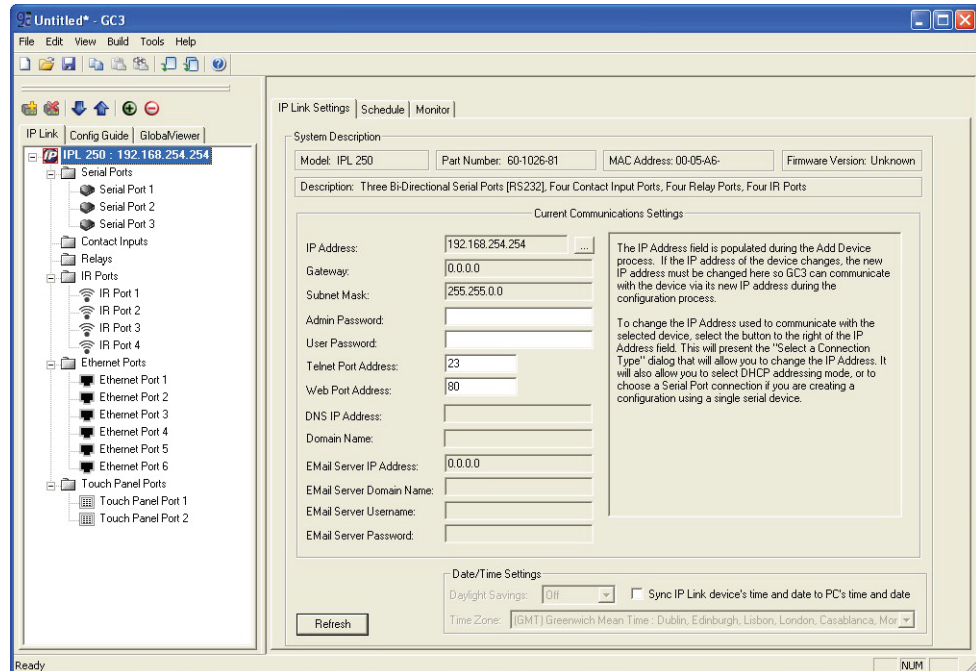


Figure 22. Configuring an IP Link Device

- Select Touchpanel Port 1. The screen shows the available options for the TouchLink panel. To add the GUI Configurator project that was uploaded to the TouchLink panel, click **“Click here to add one.”**

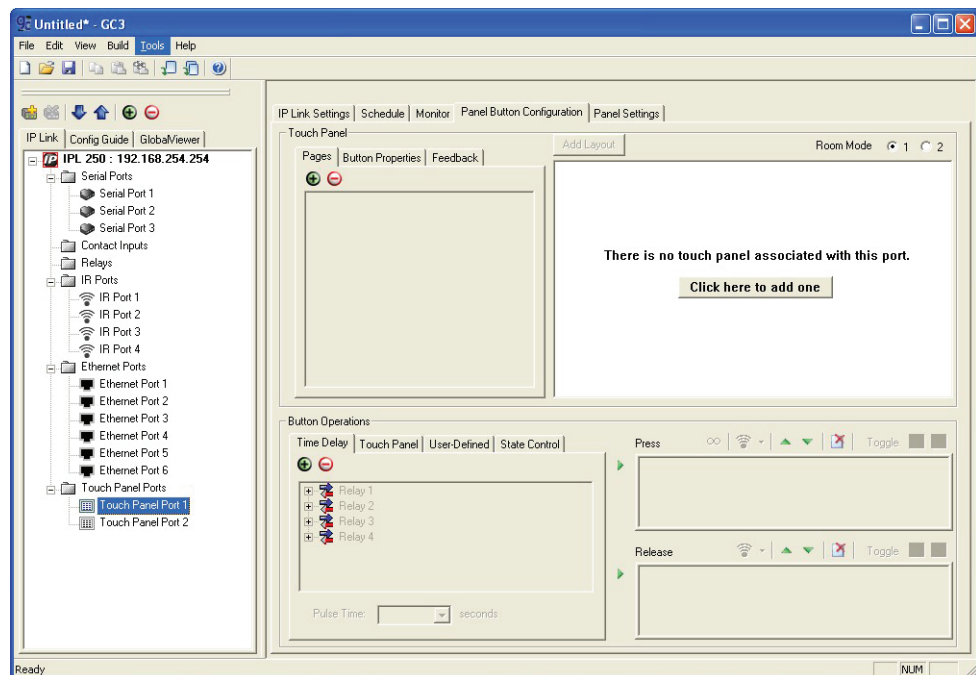


Figure 23. Adding a TouchLink panel

7. The “Add TouchPanel” dialog box opens.

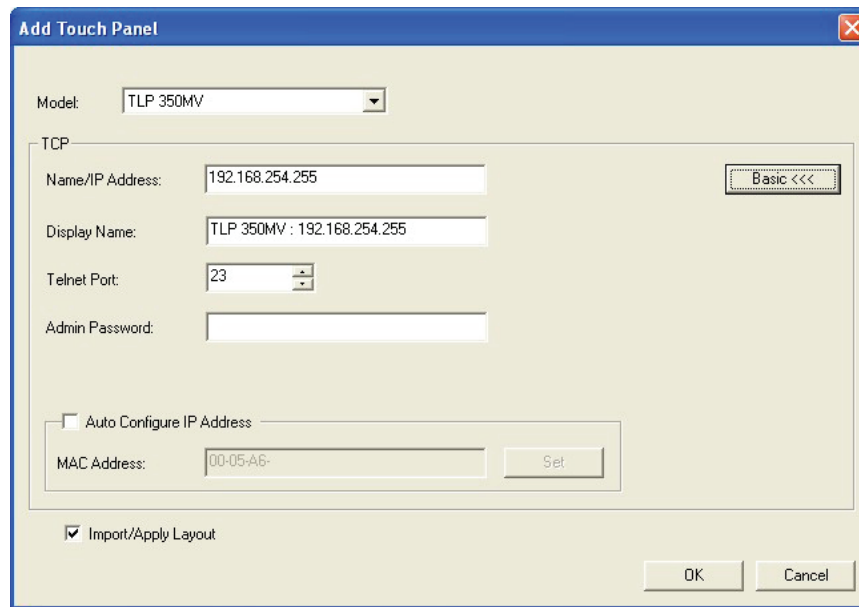


Figure 24. Add Touchpanel Dialog Box

- a. Ensure the TouchLink panel model is selected from the drop-down menu and enter the IP address.
 - b. Set the Telnet Port (usually 23) and, if necessary, enter the password.
 - c. Check the “**Import/Apply Layout**” box and click **OK**.
8. The window now shows the GUI from the TouchLink panel.

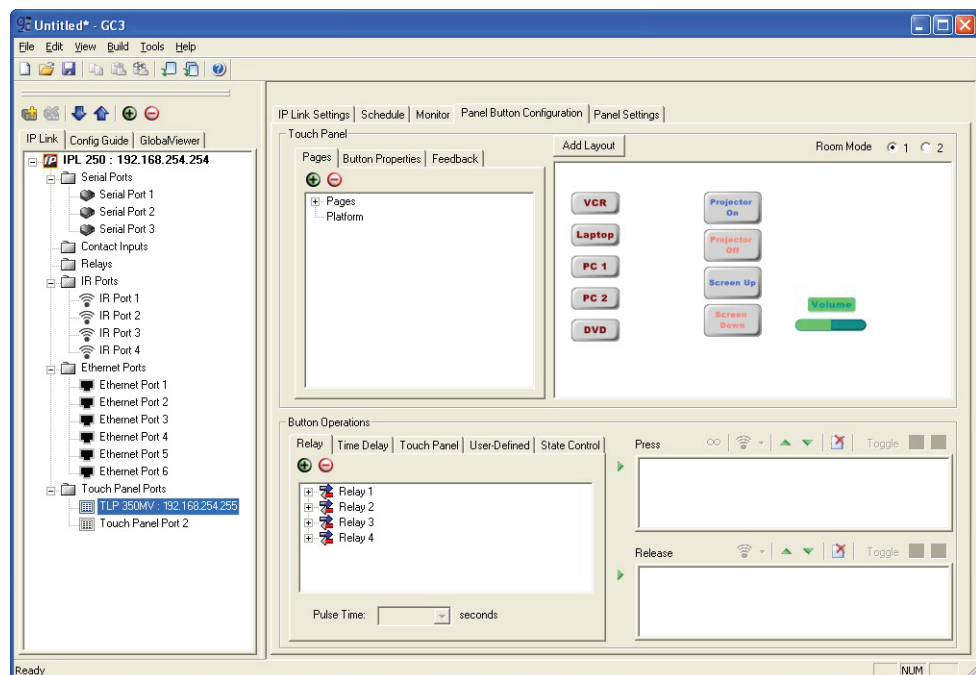


Figure 25. Touchpanel GUI Loaded Onto Global Configurator 3

9. You must now use Global Configurator to associate functions with the screen elements that you designed in GUI Configurator. The steps for carrying this out can be found in the Global Configurator help file.

Reference Information

- [Specifications](#)
- [Product Dimensions](#)
- [Part Numbers \(Included parts\)](#)
- [Accessories \(Optional\)](#)

Specifications

Display

| | |
|-----------------------|------------------------------------|
| Screen type | Active matrix TFT color display |
| Size | 3.5" (8.9 cm), measured diagonally |
| Resolution | 320x240 |
| Dot/pixel pitch | 114 dpi |
| Aspect ratio | Standard |
| Color depth | 18 bit, 256k colors |
| Transparency | 8 bit alpha channel |
| Brightness | 225 nits (cd/m ²) |
| Contrast | 80:1 |
| Backlight | LED |
| Viewing angle | ±50° horizontal, +50° vertical |
| Touch screen | Resistive membrane |

Memory

| | |
|-------------|--|
| SDRAM | 16 MB for graphics processing 8 MB for system use |
| Flash | 7 MB for project storage 1 MB for system use |

Control — Ethernet interface

| | |
|--|--|
| Ethernet control/communications port | 1 female RJ-45 connector |
| Ethernet data rate | 10/100Base-T, half/full duplex with autodetect |
| Ethernet protocol | ICMP, IP, TCP (control), UDP, DHCP, Telnet |
| Default settings | Link speed and duplex level: autodetected IP address = 192.168.254.254 Subnet mask = 255.255.0.0 Default gateway = 0.0.0.0 DHCP = off |
| Program control | Extron Global Configurator 3.0 or higher GUI Configurator for Windows® Extron Simple Instruction Set™ (SIS™) Microsoft® Internet Explorer® ver. 6 or higher, Telnet |

Control— touch panel

| | |
|-----------------------|--------------------------|
| Lid switch | On/off |
| Light sensor..... | On/off |
| External buttons..... | 10 backlit, customizable |

Video input — preview input

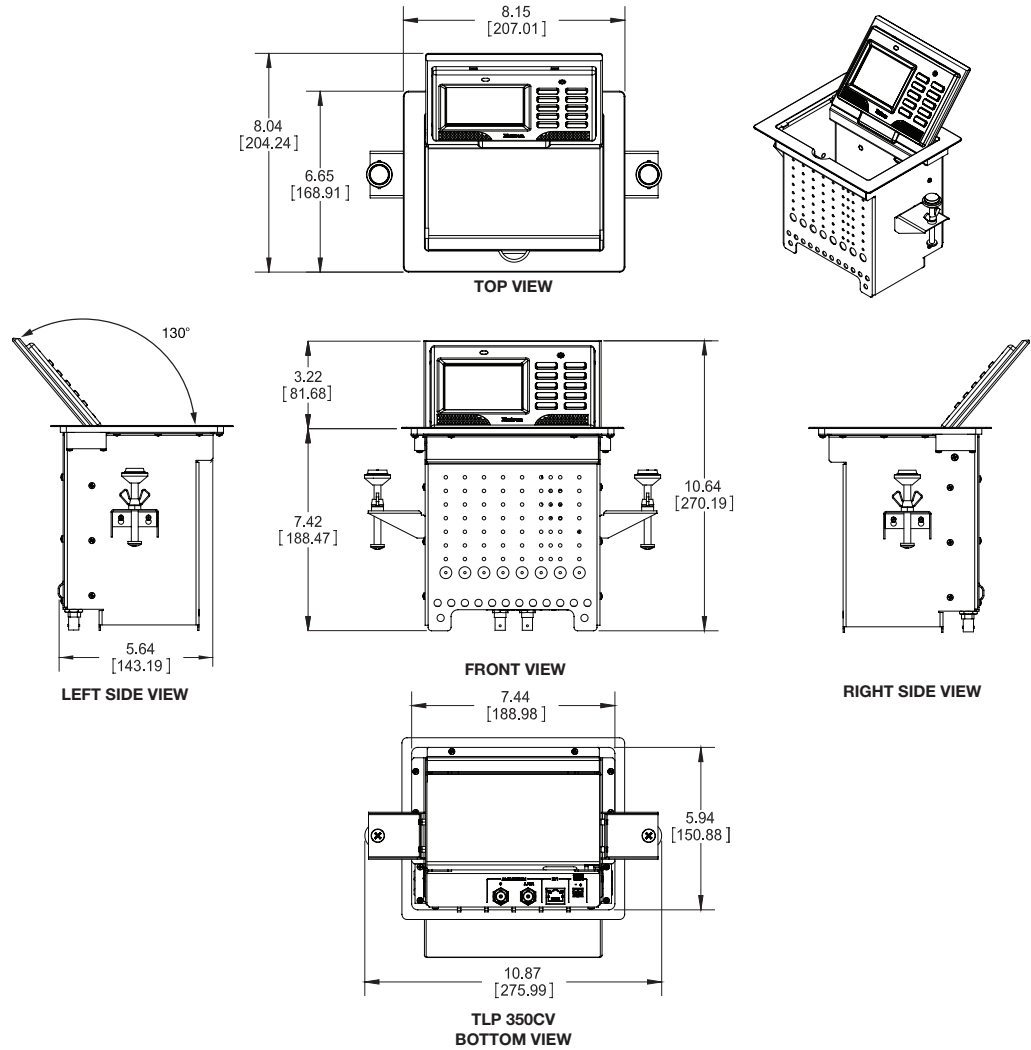
| | |
|--------------------------|--|
| Number/signal type | 1 S-video or composite video |
| Connectors | 2 female BNC |
| Nominal levels | 1 Vp-p for Y of S-video and for composite video 0.3 Vp-p for C of S-video |
| Impedance | 75 ohms |
| Standards | NTSC, PAL |

Audio output

| | |
|--------------------------|--|
| Speaker output | 1 mono, 89 dB SPL, 0.1 watt, 0.1 m, half space |
| Frequency response | 900 Hz to 6 kHz, ± 5 dB |
| Playback format(s) | WAV files: 8 bit PCM, mono, 8 kHz sampling |

General

| | |
|--------------------------------|--|
| External power supply | 100 VAC to 240 VAC, 50-60 Hz, external; to 12 VDC, 1 A, regulated |
| Power input requirements | +12 VDC, 0.75 A |
| Temperature/humidity | Storage: -13 to +158 °F (-25 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing |
| Cooling..... | Convection, no vents |
| Mounting | |
| Furniture mount | With included hardware |
| Min./max. table thickness..... | 0.375" to 2.00" (0.95 cm to 5.08 cm) |
| Enclosure type..... | Metal |
| Dimension diagram examples | |



NOTE: Architectural Adapter Plates (AAPs) shown in the diagrams above and in photographs are examples only. AAPs are optional accessories for this product. AAPs and cables must be ordered separately.

Enclosure dimensions

CAUTION: Use the appropriate metal Extron routing template or refer to the surface cutout dimensions here before cutting a hole in the furniture or other surface. Pay special attention to the direction the unit will face; the unit's connector access side is underlined. Extron is not responsible for miscut mounting holes.

| | |
|-----------------------------------|--|
| Top plate (outer rim) | 8.15" W x 6.65" D (<u>20.70</u> cm W x 16.89 cm D) |
| Surface cutout (inside rim) | 7.50 +0.00/-0.02" W x 6.00 +0.00/-0.02" D (<u>19.05 +0.00/-0.05</u> cm W x 15.24 +0.00/-0.05 cm D) |
| Box (under surface)..... | 7.42" H x 10.87" W (front/rear of unit) x 5.64" D with clamps (18.85 cm H x 27.6 cm W x 14.32 cm D with clamps) |
| Product weight..... | 5.8 lbs (2.6 kg) |
| Shipping weight..... | 9 lbs (4 kg) |
| Vibration..... | ISTA 1A in carton (International Safe Transit Association) |

Regulatory compliance

| | |
|--------------------|--|
| Safety | CE, c-UL, UL |
| EMI/EMC | CE, C-tick, FCC Class A, ICES, VCCI |
| Environmental..... | Complies with the applicable requirements of RoHS and WEEE. |
| MTBF | 30,000 hours |
| Warranty..... | 3 years parts and labor; touchscreen display and overlay components are covered for 1 year |

NOTES: All nominal levels are at $\pm 10\%$.
Specifications are subject to change without notice.

Part Numbers (Included parts)

| Description | Part number |
|---|--------------|
| TLP 350CV (US black anodized) | 60-1017-020A |
| TLP 350CV (US brushed aluminum) | 60-1017-021A |
| TLP 350CV (EU black anodized) | 60-1017-020D |
| TLP 350CV (EU brushed aluminum) | 60-1017-021D |
| TLP 350CV (Universal - Black anodized) | 60-1017-020J |
| TLP 350CV (Universal - Brushed aluminum) | 60-1017-021J |
| TLP 350CV (Black anodized - no AC outlet) | 60-1017-0200 |
| TLP 350CV (Brushed aluminum - no AC outlet) | 60-1017-0210 |
| Default Button kit (10), preinstalled | |
| Power Supply, 12 VDC, 1.0 A | |
| Button Kit, Accessories | |
| Table Clamp assembly (2) | |
| AAP nuts (bag) | |
| DVD with software and Installation Guide | |
| TLP 350CV Setup Guide | |

Pass-through and Blank AAPs (Included)

| AAPs | Pass-through | Blank |
|--------------|--------------|-------|
| US | 4 | 3 |
| EU/Universal | 3 | 3 |
| No AC | 4 | 5 |

AAP Brackets (Included)

| AAPs | Single | Double | Triple |
|--------------|--------|--------|--------|
| US | 0 | 2 | 1 |
| EU/Universal | 1 | 1 | 1 |
| No AC | 0 | 3 | 1 |

Accessories (Optional)

| Description | Part number |
|--|-------------|
| TLP 350CV routing template | 70-694-01 |
| Individual Buttons (see www.extron.com) | |
| German/French Button Kit | 70-698-07 |
| Cable Retractor VGA | 70-678-01 |
| Cable Retractor PC Audio | 70-678-02 |
| Cable Retractor Network | 70-678-03 |
| Cable Retractor HDMI | 70-678-04 |
| Cable Retractor USB | 70-678-05 |
| Cable Retractor DVI | 70-678-06 |
| IPL T S1 | 60-801-81 |
| IPL T S2 | 60-544-81 |
| IPL T S4 | 60-544-83 |
| IPL T S6 | 60-544-84 |
| IPL 250 | 60-1026-81 |
| IPL 500 | 60-1071-01 |
| IPL T CR 48 | 60-544-05 |
| IPL T SFI 244 | 60-544-06 |
| System 208 | 60-1051-02 |
| Single-space AAP Bracket Kit | 70-693-01 |
| | |

Reset Modes, Button Replacement, Firmware Updates

- [Reset Modes](#)
- [Button Kits](#)
- [Button Replacement](#)
- [Updating Firmware](#)

Reset Modes

The TLP 350CV has four reset modes that correspond to four of the five reset modes for the IP Link controllers.

The modes are initiated by pressing the reset button. Using a paper clip, push through the reset access hole on the right side of the faceplate as shown below.

NOTE: The access holes are very small. Take care when pressing the reset button to avoid scratching the faceplate.

The successful completion of a reset is indicated by four flashes of the reset LED.

The TLP 350CV reset modes are initiated by pressing the reset button on the front panel. See the table on the following page for details.

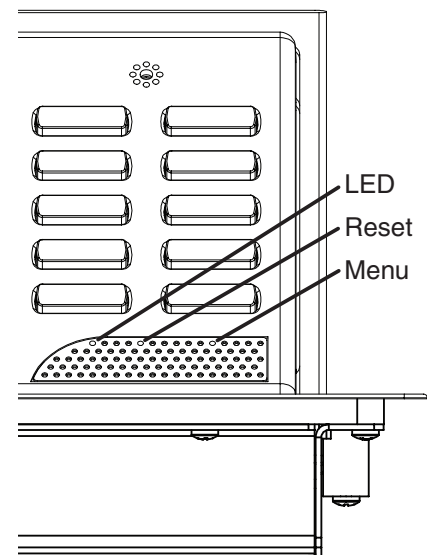


Figure 26. Reset Buttons

| TLP 350CV Reset Mode Summary | | | |
|------------------------------|------|---|---|
| | Mode | Mode Activation | Result Purpose/Notes |
| Use Factory Firmware | 1 | <p>Hold the reset button while applying power.</p> <p>NOTE: After a mode 1 reset, update the TLP 350CV firmware to the latest version. DO NOT operate the firmware version that results from this mode reset.</p> | <p>The TLP 350CV reverts to the factory default firmware. Event scripting does not start if the TLP 350CV is powered on in this mode. All user files and settings (drivers, adjustments, IP settings, etc.) are maintained.</p> <p>NOTE: If you do not want to update the firmware, or performed a mode 1 reset by mistake, cycle power to the TLP 350CV to return to the firmware version running prior to the reset.</p> <p>This mode reverts to the factory default firmware version if incompatibility issues arise with user-loaded firmware.</p> <p>NOTE: User-defined Web pages may not work correctly if using an earlier firmware version.</p> |
| | 3 | <p>Press and hold the Reset button until the Power LED blinks once (3 sec.), then release and within 1 second press Reset momentarily (<1 sec).</p> <p>NOTE: Nothing happens if the momentary press does not occur within 1 second.</p> | <p>Toggles events on or off.</p> <p>Useful for troubleshooting</p> |
| Reset all IP Settings | 4 | <p>Press and hold the Reset button for about 6 sec. until the Power LED blinks twice (once at 3 sec., again at 6 sec.), then release and within 1 second press Reset momentarily (< 1 sec.).</p> <p>NOTE: Nothing happens if the momentary press does not occur within 1 second.</p> | <ul style="list-style-type: none"> • Enables ARP capability. • Set the IP address to 192.168.254.254 (default). • Sets the subnet mask to 255.255.0.0 (default). • Sets the gateway address to 0.0.0.0 (default). • Sets port mapping back to default. • Turns DHCP off. • Turns events off. <p>Enables setting IP address information using ARP and MAC address.</p> |
| Reset to Factory Defaults | 5 | <p>Press and hold the Reset button for about 9 sec. until the Power LED blinks three times (once at 3 sec., again at 6 sec., again at 9 sec.), then release and within 1 second press Reset momentarily (< 1 sec.).</p> <p>NOTE: Nothing happens if the momentary press does not occur within 1 second.</p> | <p>Performs a complete reset to factory defaults, except for firmware:</p> <ul style="list-style-type: none"> • Does everything mode 4 reset does. • Removes button/touch panel configurations. • Resets all IP options. • Removes scheduling settings. • Removes/clears all files from the TLP 350CV. <p>Useful to start over with configuration and/or uploading, and to replace events.</p> |

Button Kits

All ten positions of front panel buttons may be replaced with buttons used to customize the appearance and functionality of the TLP 350CV TouchLink™ Touchpanel.

The Default buttons are preinstalled on the TLP 350CV.

Buttons are available in pre-packaged kits, or may be ordered individually. Check the Extron web-site at www.extron.com for a complete list of available titles. The downloadable order form shows all the buttons available for the TLP 350CV.

Button Replacement

To replace one or more buttons on the front panel of the TLP 350CV:

1. Remove power from the TLP 350CV.
2. The faceplate is snapped on and held in four places, two on top and two at the bottom of the faceplate. Using an Extron Tweezer, gently push down on the two top tabs as shown to release the faceplate.
3. The faceplate is still captured by two clips on the bottom. While rotating the faceplate away from the panel, push it down slightly to release the two clips.

NOTE: Prior to removing the faceplate it may be helpful to rotate the touch panel forward (as if closing it) to about a 30° angle to prevent the buttons from falling out of the faceplate.

4. Replace all desired buttons making certain the text has the proper orientation.
5. Replace the faceplate from the top. First slide the bottom into the recessed space on the top of the enclosure, then snap the top two catches released in step 2, into place.
6. While holding the faceplate in place, rotate the panel to its normal open position.
7. Snap the bottom of the faceplate in place to complete the button replacement. Be certain both bottom catches snap into place. If alignment does not seem correct, repeat the installation of the faceplate from step 5.
8. Connect power and ensure all buttons function properly. If they do not, begin the button replacement again and make certain the buttons remain properly seated during faceplate installation.

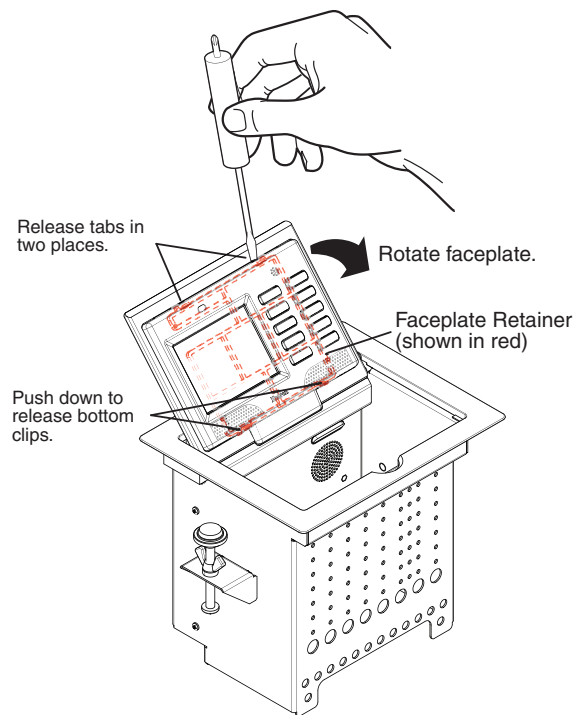


Figure 27. Release faceplate tabs

Updating Firmware

Firmware for the TLP 350CV can be upgraded using the Extron Firmware Loader, a web browser and the default web pages, or GUI Configurator. Before starting, consult your IT team and ensure that the TLP 350CV has a unique IP address.

Before an upgrade, visit www.extron.com to obtain the latest firmware.

NOTE: The factory default IP address for the TLP 350CV is 192.168.254.254. Consult with your IT Department to ensure all IP addresses are correctly assigned.

Obtaining the Firmware Update File

Firmware update files are located on the software disc that ships with unit or can be downloaded, free of charge, from the Extron website (www.extron.com).

To download a firmware file to a computer:

1. Power on a computer with internet access.
2. To download firmware for the TouchLink panel unit:
 - a. From the Software Products disc, insert the disc into the DVD ROM drive and select the **Firmware** tab. Locate the firmware file and click **Install**. Follow the on-screen instructions to download the file. Note the file location.
 - b. From the Extron Web site (www.extron.com), select the **Download** tab, then click on the **Firmware** selection. Locate the firmware file and click **Download**. Follow the on-screen instructions to download the file. Note the file location.



Figure 28. Extron Web Page — Download Center

3. Use the update method of your choice to install the new firmware.

Updating Firmware with Firmware Loader

1. Power on a computer with internet access and ensure the computer and the TLP 350CV are connected to the same network.
2. Download the firmware upgrade. (See [Obtaining the Firmware Update File on page 41](#).) Make a note of the folder where the firmware file is located.
3. Install the Extron Firmware Loader utility onto the computer if it is not already present. This is on the software disk that ships with the unit or can be downloaded, free of charge, from the Extron Web site (www.extron.com).
 - a. From the Software Products disc, insert the disc into the DVD ROM drive and select the **Software** tab. Locate the Firmware Loader program and click **Install**. Follow the on-screen instructions to install the program.
 - b. To install from the Extron Web site (www.extron.com), select the **Download** tab, click on the **Software** tab, then locate the Firmware Loader program and click **Download**. Follow the on-screen instructions to complete installation.
4. Open the firmware loader utility.
5. On the "**Add Device**" dialog box, select the TLP 350CV, then choose **TCP/IP** from the "Connection Method" dropdown.

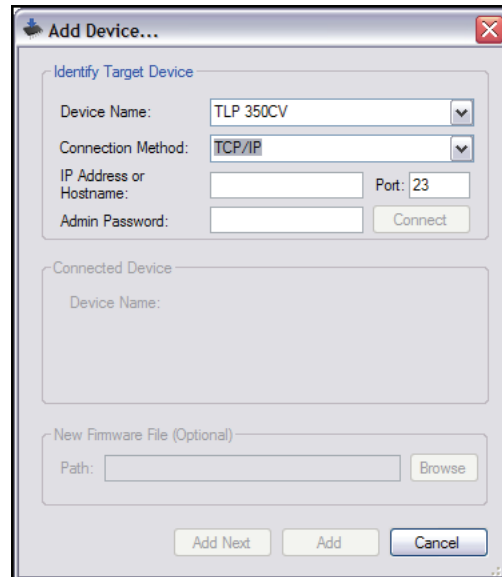


Figure 29. Add Device Dialog

6. Enter the IP address for the TLP 350CV, a Telnet port number (23), and, if necessary, a password. Click **Add**. The firmware loader opens.

NOTE: Administrator level privileges are required to upload firmware to Extron devices.

- Click **File | Open** and navigate to the folder where the firmware file is located. Click on the file to select it, then click **Begin**.

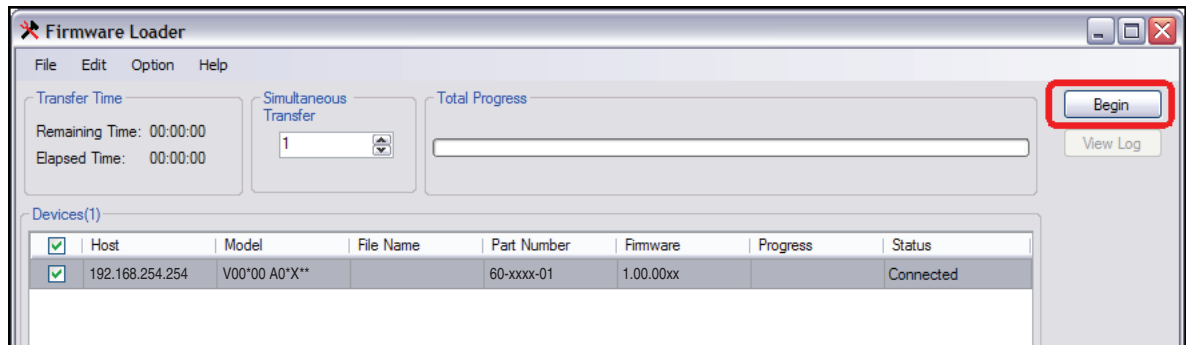


Figure 30. Firmware Loader, Begin Firmware Upload

The firmware transfer takes approximately 3 minutes.

- When the **"Transfer Complete!"** message appears, click **File | Exit** to close the Firmware Loader.

Updating Firmware Using GUI Configurator

- Power on a computer with internet access and ensure the computer and the TLP 350CV are connected to the same network. If necessary, [install the Extron Firmware Loader](#) utility onto the computer (see step 3 of the previous section).
- Download the firmware upgrade. (See [Obtaining the Firmware Update File on page 41.](#)) Make a note of the folder where the firmware file is saved.
- Open GUI Configurator, then select the Firmware Loader by clicking on **"Firmware Update Manager..."** in the **Tools** menu.

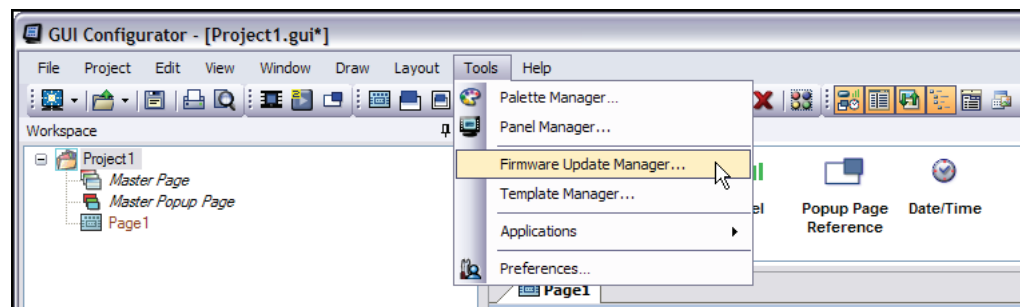


Figure 31. Opening Firmware Update Manager from GUI Configurator

- Follow steps 5 to 8 from the previous section ("Updating firmware using the Extron Firmware Loader utility").

Updating Firmware From a Web Browser

1. Power on a computer with internet access.
2. Ensure the computer and the TLP 350CV are connected to the same network.
3. Download the firmware upgrade. (See [Obtaining the Firmware Update File on page 41](#).) Make a note of the folder where the firmware file is saved.
4. Open a browser and type the IP address of the TLP 350CV into the address box. The browser opens the TouchLink panel web pages (see [Using the TouchLink Panel Web Pages on page 19](#)).



Figure 32. Firmware Upgrade Web Page

5. Click on the **Configuration** tab at the top of the page and then select **Firmware Upgrade** from the bar on the left.
6. Use the Browse button to navigate to the firmware file that was saved in step 3.
7. Click **Upload**. The Touchpanel screen will show the message "Firmware Uploading... Please Wait...". When the firmware is uploaded, there is a message saying "ReStarting...". Once the firmware is installed, the panel can be calibrated using the on-screen menus (see [Internal On-screen Menus on page 13](#)), or the TouchLink panel web pages (see [Using the TouchLink Panel Web Pages on page 19](#)).

Extron® Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of three years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

USA, Canada, South America, and Central America:

Extron Electronics
1001 East Ball Road
Anaheim, CA 92805
U.S.A.

Japan:

Extron Electronics, Japan
Kyodo Building, 16 Ichibancho
Chiyoda-ku, Tokyo 102-0082
Japan

Europe, Africa, and the Middle East:

Extron Europe
Hanzeboulevard 10
3825 PH Amersfoort
The Netherlands

China:

Extron China
686 Ronghua Road
Songjiang District
Shanghai 201611
China

Asia:

Extron Asia
135 Joo Seng Road, #04-01
PM Industrial Bldg.
Singapore 368363
Singapore

Middle East:

Extron Middle East
Dubai Airport Free Zone
F12, PO Box 293666
United Arab Emirates, Dubai

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions, or modifications were made to the product that were not authorized by Extron.

NOTE: If a product is defective, please call Extron and ask for an Application Engineer to receive an RA (Return Authorization) number. This will begin the repair process.

USA: (714) 491-1500

Asia: 65.6383.4400

Europe: 31.33.453.4040

Japan: 81.3.3511.7655

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.

| Extron USA - West Headquarters | Extron USA - East | Extron Europe | Extron Asia | Extron Japan | Extron China | Extron Middle East |
|--|--|--|--|--|--|--|
| +800.633.9876 Inside USA/Canada Only | +800.633.9876 Inside USA/Canada Only | +800.3987.6673 Inside Europe Only | +800.7339.8766 Inside Asia Only | +81.3.3511.7655 +81.3.3511.7656 FAX | +400.883.1568 Inside China Only | +971.4.2991800 +971.4.2991880 FAX |
| +1.714.491.1500 +1.714.491.1517 FAX | +1.919.863.1794 +1.919.863.1797 FAX | +31.33.453.4040 +31.33.453.4050 FAX | +65.6383.4400 +65.6383.4664 FAX | | +86.21.3760.1568 +86.21.3760.1566 FAX | |